

DTC-2000ES

SERVICE MANUAL

US Model
AEP Model

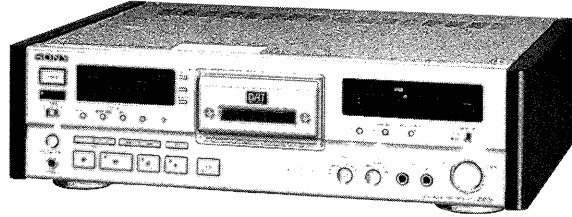


Photo : AEP Model

DAT SBM
Digital Audio Tape Super Bit Mapping

| | |
|------------------------------------|------------------------|
| Model Name Using Similar Mechanism | NEW |
| MD Mechanism Type | DATM-53 (US,AEP Model) |
| | DATM-54 (German Model) |

| | |
|------------------|--|
| Tape | Digital audio tape |
| Recording head | Rotary head |
| Recording time | Standard: 120 minutes Long-play mode: 240 minutes (with DT-120) |
| Tape speed | Standard: 8.15 mm/s Long-play mode: 4.075 mm/s |
| Drum rotation | Standard: 2,000 rpm Long-play mode: 1,000 rpm |
| Error correction | Double-Read Solomon code |

SPECIFICATIONS

Input

| | Jack type | Impedance | Rated input level |
|-------------------|--------------|------------|-----------------------------|
| LINE IN | Phono jack | 47 kilohms | -4 dB |
| DIGITAL IN | Phono jack | 75 ohms | 0.5 V _{p-p} , ±20% |
| DIGITAL IN | Optical jack | — | — |
| MIC | Phone jack | 47 kilohms | -44 dB |

| | |
|-------------------------------|---|
| Tape | |
| Track pitch | 13.6 μm (20.4 μm) |
| Sampling frequency | 48 kHz, 44.1 kHz, 32 kHz |
| Modulation system | 8-10 Modulation |
| Transfer rate | 2.46 Mbit/sec |
| Number of channels | 2 channels, stereo |
| D/A conversion (Quantization) | Standard: 16-bit linear Long-play mode: 12-bit non-linear |
| Frequency response | Standard: 2-22,000 Hz (±0.5 dB) Long-play mode: 2-14,500 Hz (±0.5 dB) |
| Signal-to-noise ratio | Standard: more than 94 dB Long-play mode: more than 94 dB |
| Dynamic range | Standard: more than 94 dB Long-play mode: more than 94 dB |
| Total harmonic distortion | Standard: less than 0.0035% (1 kHz) Long-play mode: less than 0.075% (1 kHz) |
| Wow and flutter | Below measurable limit (±0.001% W. PEAK) |

Output

| | Jack type | Impedance | Rated output | Load Impedance |
|--------------------|-------------------|-----------|----------------------------|----------------------|
| LINE OUT | Phono jack | 470 ohms | -4 dB | More than 10 kilohms |
| PHONES | Stereo phone jack | 220 ohms | 1.3 mW | 32 ohms |
| DIGITAL OUT | Phono jack | 75 ohms | 0.5V _{p-p} , ±20% | 75 ohms |

DIGITAL OUT (optical jack) wavelength: 660 nm

— Continued on next page —

DIGITAL AUDIO TAPE DECK
SONY®



General

| | |
|--------------------|--|
| Power requirements | Model for European countries 220 – 230 V AC, 50/60 Hz Model for U.S.A. 120V AC 60Hz |
| Power consumption | 50 W |
| Dimensions | Model for European countries Approx 470 × 135 × 380 mm (w/h/d) (18 ⁵ / ₈ × 5 ³ / ₈ × 15 inches) Model for U.S.A. Approx 430 × 135 × 380 mm (w/h/d) (16 ¹⁵ / ₁₆ × 5 ³ / ₈ × 15 inches) |
| Weight | Model for European countries Approx 12.5 kg Model for U.S.A. Approx 11.5kg |

Remote commander (supplied)

| | |
|-----------------------|---|
| Remote control system | Infrared control |
| Power requirements | 3V DC, with two size-AA (R6) batteries |
| Dimensions | Approx 63 × 19 × 175 mm (w/h/d) (2 ¹ / ₂ × 3 ³ / ₄ × 7 inches) |
| Weight | Approx 130 g (5 oz) incl. batteries |

Supplied accessories

| | |
|---|--|
| Remote commander (1) | |
| Sony batteries SUM-3 (NS) (2) | |
| Audio connecting cords (2 phono plugs-to-2 phono plugs, stereo for line inputs and outputs) (2) | |

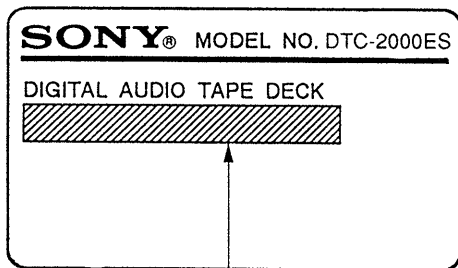
Design and specifications are subject to change without notice.

Optional accessories

| | |
|-------------------|--|
| Optical cable | DOC-15SP etc. |
| Connecting cord | RK-C510HG or equivalent (2 phono plugs-to-2 phono plugs: gold- plated connectors and high fidelity LC-OFC line cord) VMC-10HG or equivalent (phono plug-to-phono plug): for digital connection |
| Cleaning cassette | DT-10CL |

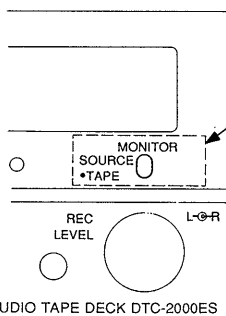
MODEL IDENTIFICATION

— SPECIFICATION LABEL —



US MODEL : AC120V, 60Hz, 50W
AEP, G MODEL : AC220—230V, 50/60Hz, 50W

the right side of the front panel.



The monitor lamp is not installed in G model.

G ; German model

DIGITAL AUDIO TAPE DECK DTC-2000ES

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.

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.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

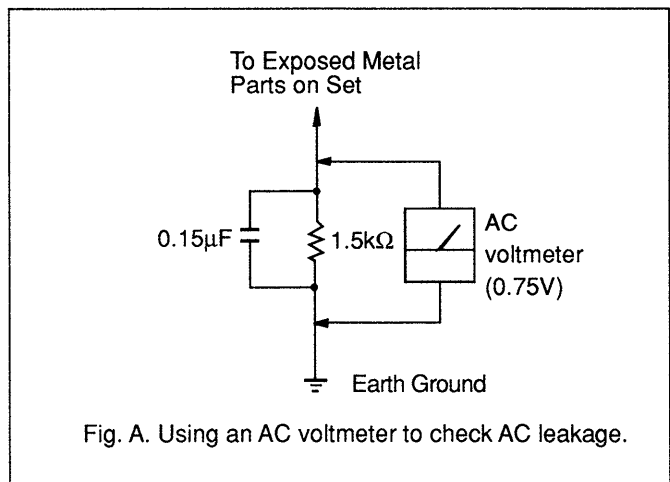


Fig. A. Using an AC voltmeter to check AC leakage.

TABLE OF CONTENTS

| <u>Section</u> | <u>Title</u> | <u>Page</u> | <u>Section</u> | <u>Title</u> | <u>Page</u> |
|----------------|--|-------------|--|--|-------------|
| 1. | GENERAL | | 4-6. | Schematic Diagram — MD Section — | 37 |
| | Location and Function of Controls | 4 | 4-7. | Printed Wiring Board — MD Section — | 41 |
| | Clock Setting | 8 | 4-8. | Printed Wiring Board — Main Section — | 45 |
| 2. | DISASSEMBLY | | 4-9. | Schematic Diagram — Main Section — | 49 |
| 2-1. | Removal of Case, Side Panel Assemblies, Panel Assembly (Cassette) | 10 | 4-10. | Schematic Diagram — Audio Section — | 54 |
| 2-2. | Removal of Front Panel Assembly | 10 | 4-11. | Printed Wiring Board — Audio Section — | 59 |
| 2-3. | Removal of Mechanism Deck | 11 | 4-12. | Printed Wiring Board — Digital Section — | 62 |
| 2-4. | Removal of Cassette Holder Assembly | 11 | 4-13. | Schematic Diagram — Digital Section — | 65 |
| 2-5. | Removal of Drum Assembly (DOU-15A-R) (US, AEP Model) | 12 | 4-14. | Schematic Diagram — Panel Section — | 69 |
| | Removal of Drum Assembly (DOU-03D-R) (G Model) | 12 | 4-15. | Printed Wiring Board — Panel Section — | 73 |
| 2-6. | Removal of MD Board, DC-Motor U-2A (Reel) (M903) | 13 | 4-16. | Printed Wiring Board — Power Section — | 76 |
| 2-7. | Removal of Loading Motor Board, DC Motor U-17A (Capstan) (M902) | 13 | 4-17. | Schematic Diagram — Power Section — | 79 |
| 3. | ADJUSTMENTS | | 4-18. | IC Pin Functions | |
| | Notes When Making Adjustments | 14 | • IC104, 204 D/A Converter (CXD2562Q) | 82 | |
| 3-1. | Meshanical Adjustments | 16 | • IC401, 402 DSP (CXD2605Q) | 84 | |
| 3-2. | Electrical Adjustments | 16 | • IC403 Main Microprocessor (CXP87532-007Q) | 87 | |
| 3-3. | Checks and Adjustments for Date Function | 18 | • IC405 DSP (CXD2704Q) | 90 | |
| 4. | DIAGRAMS | | • IC601 FL Controller (DISPLAY) (CXP82220-014Q) | 92 | |
| 4-1. | Circuit Boards Location | 20 | • IC651 Meter Microprocessor (CXP82220-009Q) | 94 | |
| 4-2. | Block Diagrams | | • IC652 Meter IC (MSM6338MS) | 96 | |
| | — Panel, D/A,A/D Section — | 21 | • IC901 Mechanism Microprocessor (CXP87532-006Q) | 97 | |
| | — Main Section — | 24 | 5. | EXPLODED VIEWS | |
| | — Power Section — | 27 | 5-1. | Case and Side Panel Assembly | 100 |
| 4-3. | Semiconductor Lead Layouts | 28 | 5-2. | Front Panel Assembly | 101 |
| 4-4. | Printed Wiring Board | | 5-3. | Chassis Assembly | 102 |
| | — RF (US, AEP Model) Section — | 30 | 5-4. | Cassette Compartment Assembly (1) | 103 |
| | — RF (German Model) Section — | 32 | 5-5. | Cassette Compartment Assembly (2) | 104 |
| 4-5. | Schematic Diagram | | 5-6. | Mashanism Deck Assembly (1) (DATM-53 : AEP, US model) (DATM-54 : G model) | 105 |
| | — RF (US, AEP Model) Section — | 33 | 5-7. | Mashanism Deck Assembly (2) (DATM-53 : AEP, US model) (DATM-54 : G model) | 106 |
| | | | 5-8. | Mashanism Deck Assembly (3) (DATM-53 : AEP, US model) (DATM-54 : G model) | 107 |
| | | | 6. | ELECTRICAL PARTS LIST | 108 |

G : German model

SAFETY-RELATED COMPONENT WARNING !!

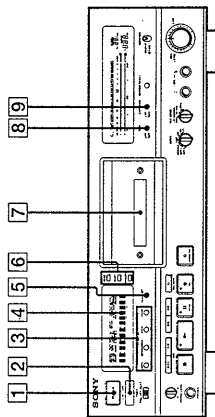
COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Location and Function of Controls

Refer to pages indicated in parentheses for details

Front Panel/Remote Commander A

- 1 POWER button
Turns the power on and off.
- 2 Remote sensor
Receives signals from the remote commander.
- 3 START ID buttons
AUTO: Press to turn the AUTO indicator on and off. When the AUTO indicator is lit, start IDs are automatically written during recording. When the AUTO indicator is not lit, a start ID is written whenever you press START ID WRITE. (39,44) REMEMBER: Press to remember all programs on a tape. If the tape has start IDs only, the tape rewinds to the beginning and program numbers are written starting from 1. (46) WRITE: Press to write a start ID during recording or playback. (41) ERASE: Press to erase a start ID. When a start ID is written together with a program number, both codes are simultaneously erased when you press this button.(43,47)
- 4 Display window (left)
Indicates the operating status.
- 5 CLOCK SET button
Press to set the built-in clock. (18)
- 6 Counter setting buttons
MODE button: Press to select the display of absolute time, elapsed playing time, remaining cassette (linear counter). (19,35) RESET button: Press to zero the linear counter. (66) MEMORY button: Press to memorize a position (memory play and memory stop functions). (60)
- 7 Cassette lid /compartment
Insert a cassette with the window side up and the safety tab facing you. A compartment in the lid of the cassette compartment allows viewing of the cassette operation. (20)
- 8 SRM (Super Bit Mapping) switch
Set to ON for Super Bit Mapping during recording an analog or digital source through the LINE IN jacks in STANDARD recording mode (REC MODE switch). (23)
- 9 EMPHASIS switch
Press to add emphasis during analog recording. (25)



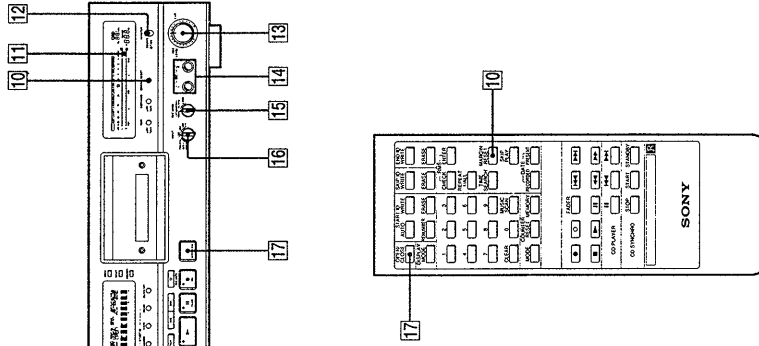
SECTION 1 GENERAL

This section is extracted from instruction manual.

Location and Function of Controls

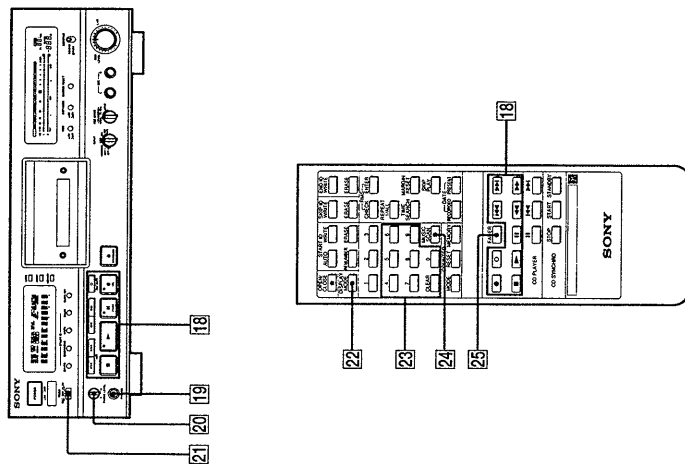
- 10 MARGIN RESET button
Press to reset the MARGIN indication. "—" appears. (30)
- 11 Display window (right)
Shows the signal level during recording and playback.
- 12 MONITOR switch
Use during recording to select the signal output from the LINE OUT connector, DIGITAL OUT connector, and the PHONES jack. Set to SOURCE to output the source signal. Set to TAPE to output the tape recorded signal. During playback, signal monitoring is possible at either setting. (29)
- 13 REC LEVEL (recording level) controls
Use to adjust the recording level and balance during analog signal recording. The outer knob controls the L (left) channel level and the inner knob the R (right) channel level. Adjust both knobs together, or independently by turning one knob while holding the other. Recording level adjustment is unnecessary when recording digital signals. (30)
- 14 MIC (microphone) jacks (L/R)
Connect microphones with a phone plug here.
- 15 REC MODE selector
Normally set to STANDARD. Set to LONG to record analog or digital signals at 32-KHz in long-play mode. (31)
- 16 INPUT selector switch
Selects the input signal to be recorded. LINE: For recording from a sound source connected to the LINE IN jacks. (14)
- 17 COAXIAL: For recording from a sound source connected to the DIGITAL IN (COAXIAL) jack. (14,26) OPT1: For recording from a sound source connected to the DIGITAL IN (OPT1) jack. (14,26) OPT2: For recording from a sound source connected to the DIGITAL IN (OPT2) jack. (14,26) MIC: For recording from microphones connected to the MIC jacks. (26) MIC ATT: For recording vocals or musical instruments with a microphone. Automatically lowers (attenuates) excessively high-signal levels. (26)
- 18 OPEN/CLOSE button
Press to open or close the cassette compartment. (20)

A



Location and Function of Controls

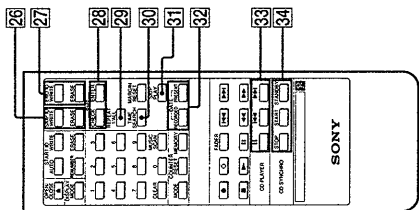
- 18** Tape operation buttons
 ■ (stop): Press to stop recording or playback.
 ▶ (play): Press to start playback or recording.
 || PAUSE: Press to pause recording or playback. To restart recording or playback, press this button again or ▲.
 If the unit stays in pause mode for about 10 minutes, the mode is automatically released and the unit stops. To restart recording or playback, press ● REC or ▶, respectively.
 ▶◀ / ▶▶ (AMS): Press to locate the beginning of a selection while the unit is playing or stopped. (57)
 ◀◀ / ▶▶ (rewind/review, fast-forward/cue): Press while the unit is stopped to rewind or fast-forward the tape.
 Press during playback to rewind or fast-forward the tape while monitoring the sound.
 ○ REC MUTE (record muting): Inserts a silent portion (space). (32)
 ● REC (recording): Press to enter recording pause. Then press || PAUSE or ▶ to start recording.
19 PHONES (headphones) jack
 Connect headphones to this jack.
20 PHONE LEVEL control
 Turn to adjust the headphones volume. (54)
21 TIMER switch
 Normally set to OFF. Set to REC or PLAY to record or play back at a specific time using an optional audio timer. (68)
22 DISPLAY MODE button
 Press to select a complete display, partial display, or no display. (10)
23 Numeric buttons (0-9) and CLEAR button
 Use the numeric buttons to specify the program number of the selection to be played back or the starting program number of a sequence during recording. Press CLEAR to erase a program number just entered. (58,62,67)
24 MUSIC SCAN button
 Press to listen to the beginning of each selection successively. (65)
25 FADER button
 Press for fade-in or fade-out during recording or playback. (34,63)



A

Location and Function of Controls

- 26** SKIP ID buttons
 WRITE: Press at the start of a portion to be skipped later.
 During playback, the portion from the skip ID to the next start ID is skipped. (48)
 ERASE: Press to erase the nearest skip ID before the current position. (49)
27 END ID buttons
 WRITE: Press to write an end ID signifying the end of playback or recording. (50)
 ERASE: Press to erase an end ID. (52)
28 RMS* play buttons
 ENTER: Press to enter a selection in a program for playback in sequential order. (67)
 CHECK: Press to check the contents of a program. (67)
 *RMS: Random Music Sensor
29 REPEAT 1/ALL button
 Press to select the repeat play mode: REPEAT 1 → REPEAT ALL → off (64)
30 TIME SEARCH button
 Enter the time from the beginning of the tape with the numeric buttons, then press TIME SEARCH to locate the specified position. (61)
31 SKIP PLAY button
 Press to activate the skip ID code function. Portions of a tape marked with a skip ID are skipped. (58)
32 DATE buttons
 RECORDED: Press to display the recording date of the tape being played. (28)
 PRESENT: Press to display the current time. (19)
33 CD operation buttons (35)
 For use only in conjunction with a Sony CD player equipped with a remote commander.
 || (pause): Press twice to start playback. Press once during playback to pause.
 ◀◀ / ▶▶ (AMS): Press to locate the start of specific selections on a CD.
34 CD SYNCHRO (CD synchronized recording) buttons (35)
 Controls the playback of a Sony CD player equipped with a remote commander for synchronized recording with the DAT deck.
 STANDBY: Press to place the unit in recording pause.
 START: Press to start recording on the DAT deck and playback on the CD player.
 STOP: Press to stop recording on the DAT deck and playback on the CD player.



A

Location and Function of Controls

Remote Commander Operation

Each button on the remote commander functions in the same way as those on the front panel with the same name. The following operations, however, cannot be performed with the remote commander, and must be done on the front panel controls:

- Turning the power on and off
- Setting the INPUT switch
- Adjusting the recording level and balance
- Adjusting the headphones level
- Setting the TAPE/SOURCE switch
- Setting the TIMER switch
- Selecting the recording mode (standard or long)
- Turning SBM and emphasis functions on and off
- Setting the clock

The remote commander must be used for the following operations and functions:

- Synchronized recording with a Sony CD player
- Controlling pause and AMS functions on a Sony CD player
- Writing and erasing skip IDs and end IDs
- Repeat play
- Skip play
- RMS (Random Music Sensor) play
- Changing the display mode
- Adjusting the brightness of the display
- Time search function
- Fade-in/fade-out function
- Displaying the recording date or current time
- Music scan function

Location and Function of Controls

Notes on the Remote Commander

- Do not expose the remote sensor on the deck to strong light such as direct sunlight and lighting equipment.
- Avoid obstructions between the remote commander and the remote sensor since they may prevent the reception of commands by the deck.
- Point the remote commander directly at the remote sensor on the deck.
- As the batteries weaken, the remote control distance will become shorter. Replace the batteries when this occurs.

Installing batteries

To avoid battery leakage

When the commander will not be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.

Battery life

About half a year of normal operation can be expected when using Sony SUM-3 (NS) batteries.

Display Window

To turn off the display

When you turn on the unit, the display lights up. During recording or playback, you can specify a partial display or no display.

Using the remote commander, press DISPLAY MODE to change the display as follows:

Normal display ←

↓
Peak level meters and margin indicator turn off.
(The DISPLAY OFF indicator lights.)

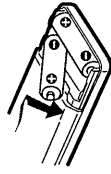
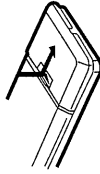
↓
The entire display turns off during recording and playback.

(The DISPLAY OFF AUTO indicator lights momentarily just before the display turns off.)

- If you press DISPLAY MODE when the unit is not recording or playing back, the DISPLAY OFF AUTO indicator lights and the entire display turns off immediately when you start recording or playback.

To adjust the brightness of the display

Hold down MODE and press numeric buttons 1, 2 or 3 on the remote commander. The higher the number, the darker the display becomes.



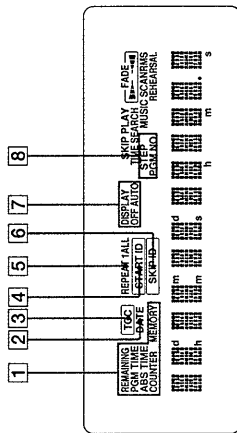
Insert two size-AA (R6) batteries with correct polarity, then close the lid.

B

Location and Function of Controls

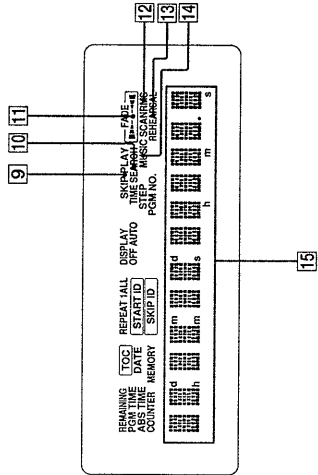
Display Window (Left) C

- REMAINING (remaining time):** Lights when the counter shows the remaining time of the tape.
- PCM TIME (program time):** Lights when the counter shows the elapsed time of the current selection.
- ABS TIME (absolute time) indicator:** Lights when the counter shows the elapsed time from the beginning of the tape.
- COUNTER:** Lights when the counter shows the elapsed time from the start of the tape or from the position at which RESET was last pressed.
- MEMORY:** Lights with the COUNTER indication to indicate that the memory function is on.
- DATE indicator**
Lights when RECORDED is pressed to show the recording date of the tape being played. Flashes when PRESENT is pressed to show current time.
- TOC (Table Of Contents) indicator**
Lights when a pre-recorded DAT cassette is played.
- START ID indicator**
Flashes (for 9 or 18 seconds) when writing or erasing a start ID code, and lights when a start ID is detected during playback.
- REPEAT indicators**
REPEAT 1: Lights during repeat play of a single selection.
REPEAT ALL: Lights during repeat play of all selections.
- SKIP ID indicator**
Lights (for 1 or 2 seconds) when writing or erasing a skip ID code or when a skip ID is detected during playback.
- DISPLAY OFF AUTO indicator**
Lights to indicate that the entire display will turn off at the start of recording or playback.
- STEP/PCM NO. indicator**
PCM NO. indicates the program number of the selection being played.
When the RMS function is on, (67), STEP appears to indicate the playing order of programmed selection.



Location and Function of Controls

- SKIP PLAY indicator**
Lights during playback when a portion marked by a skip ID is being skipped.
- TIME SEARCH indicator**
Lights when the time search function is on and the unit advances to the end of a specified (absolute) time from the start of the tape.
- FADE indicator**
FADE -II: Flashes as recording or playback fades in.
FADE -I: Flashes as recording of playback fades out.
- RMS (Random Music Sensor) indicator**
Lights when the RMS function is on. (67)
Specified program numbers appear on the display.
- REHEARSAL indicator**
Lights when the rehearsal function is on. (42,48,51) Fine adjustments made to start, skip and end ID settings appear on the display in units of 0.3 second.
- MUSIC SCAN indicator**
Light as the music scan function plays the beginning of all selections in succession.
- Time indicator**
Indicates the tape running time, absolute time, elapsed time of the current selection, or remaining time. The displayed item changes each time you press MODE.

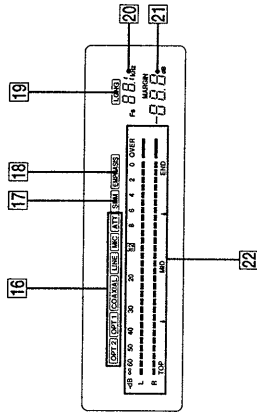


Location and Function of Controls

D

Display Window (Right) **D**

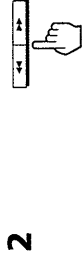
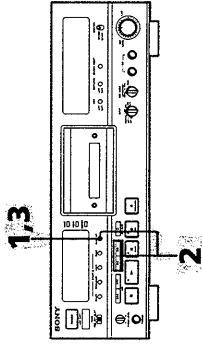
- 16** INPUT selector indicators
Lights to indicate the input signal currently selected by the INPUT select or switch.
- 17** SBM indicator
Lights when the SBM function is on (applicable during analog recording only).
- 18** EMPHASIS indicator
Lights when the emphasis function is on (during recording or playback).
- 19** LONG play mode indicator
Lights during recording or playback in long-play mode.
- 20** Sampling frequency indicator
48 kHz: Lights during recording or playback of analog input signals (standard mode).
44.1 kHz: Lights during recording or playback of a CD, MD, DCC or a pre-recorded DAT cassette tape.
32 kHz: Lights during recording or playback of analog input signals (long-play mode).
- 21** MARGIN indicator
Indicates the most recent margin between the peak input audio signal and 0 dB.
- 22** Peak level meters
Indicate the signal level during playback and recording for the left and right channels. A peak hold function holds the indication at peak level momentarily.



Clock Setting

This unit employs a built-in clock to keep track of the current date and time. Once you set the date and time, this information will be recorded on the tape along with the audio signal during recording, allowing you to check the recording date of the tape during playback at a later time.

- 1 Press CLOCK SET.**
The year indication begins to flash.
- 2 Press \blacktriangleright or \blacktriangleleft to enter the year, month, day, hour and minute.**
Pressing \blacktriangleright increases the display value; pressing \blacktriangleleft decreases the value. To move to the next item, press CLOCK SET. The day of the week is automatically calculated for any year from 1987 to 2086.
- 3 After making all settings, press CLOCK SET in synchronization with a time signal.**



Clock Setting

To view the date or time

Press PRESENT to display the date or time. Press MODE to return to the counter display.

To reset the time

Press PRESENT until the time appears, then do steps 1 to 3 on the previous page to reset the time.

Time display

The time is displayed in a 12-hour format.

Midnight and noon are displayed as follows:

Midnight: 12:00 AM

Noon: 12:00 PM

Built-in clock

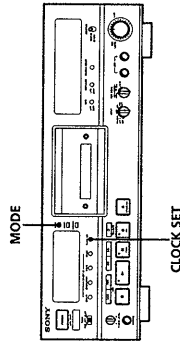
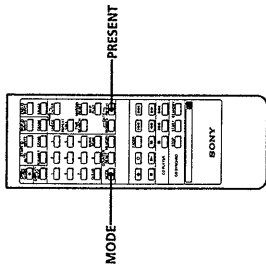
This unit's built-in clock uses a quartz oscillator, and is thus susceptible to time variations caused by changes in temperature and other conditions. For precise time stamping, it is recommended that you set the clock once a week.

Precaution on setting the clock

Although this unit's clock automatically adjusts for leap years and long and short months, do not enter a date which does not exist.

Notes

- Pressing CLOCK SET for the first time after purchasing the unit causes "m--d--m--" to appear. Do steps 2 and 3 on the previous page to set the clock.
- Set the clock while the tape is stopped.
- This unit uses a back-up battery to keep the clock running when the power is turned off. The life of the battery under normal use is approximately seven years. When the battery starts to run down, the clock will stop operating normally. When this occurs, have the battery replaced at your dealer or nearest Sony Service Center (a battery replacement fee is required).

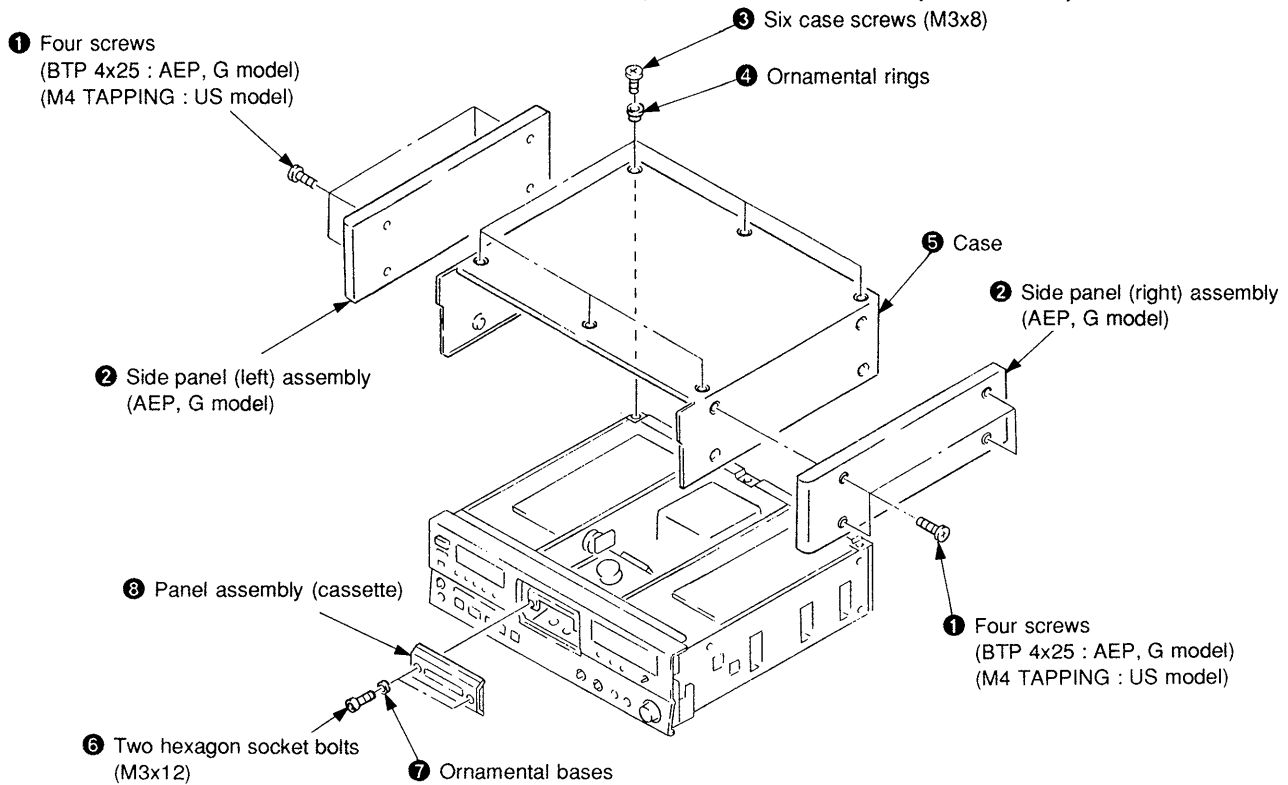


SECTION 2 DISASSEMBLY

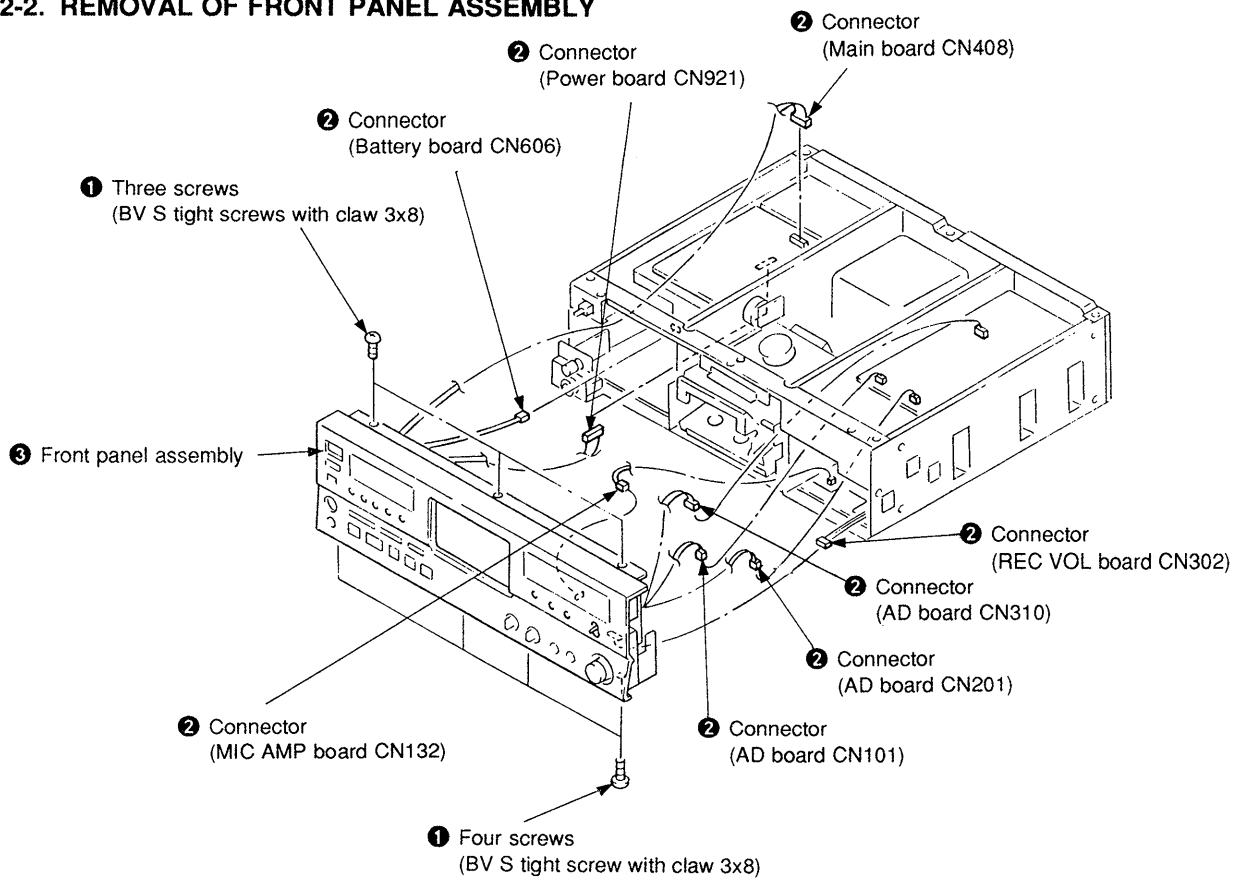
G : German model

• Remove the parts numbered in the figure (1, etc.) in numerical order.

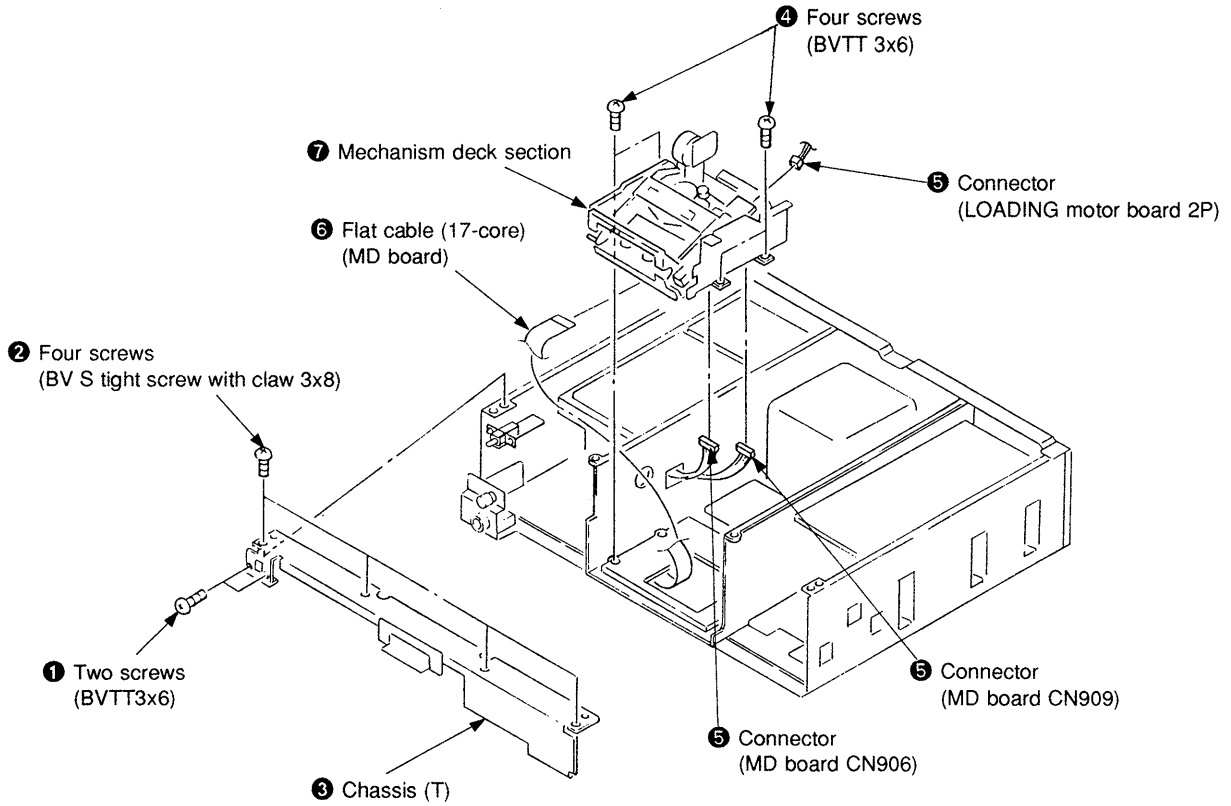
2-1. REMOVAL OF CASE, SIDE PANEL ASSEMBLIES, PANEL ASSEMBLY (CASSETTE)



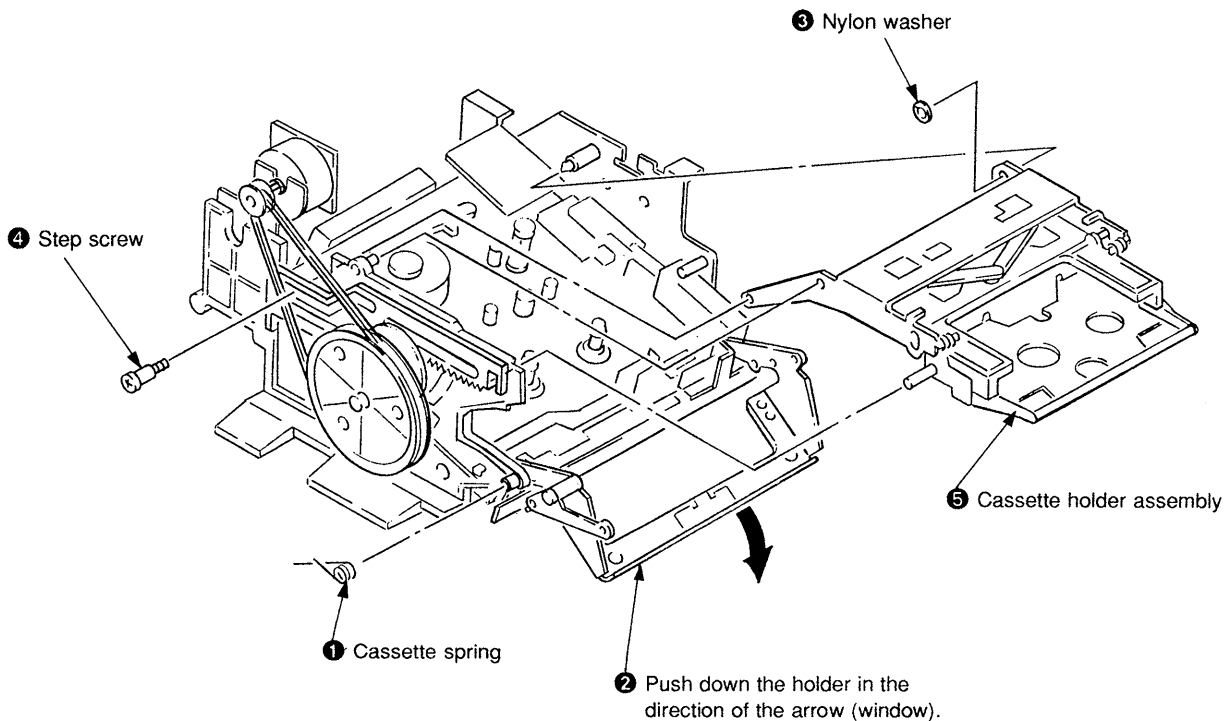
2-2. REMOVAL OF FRONT PANEL ASSEMBLY



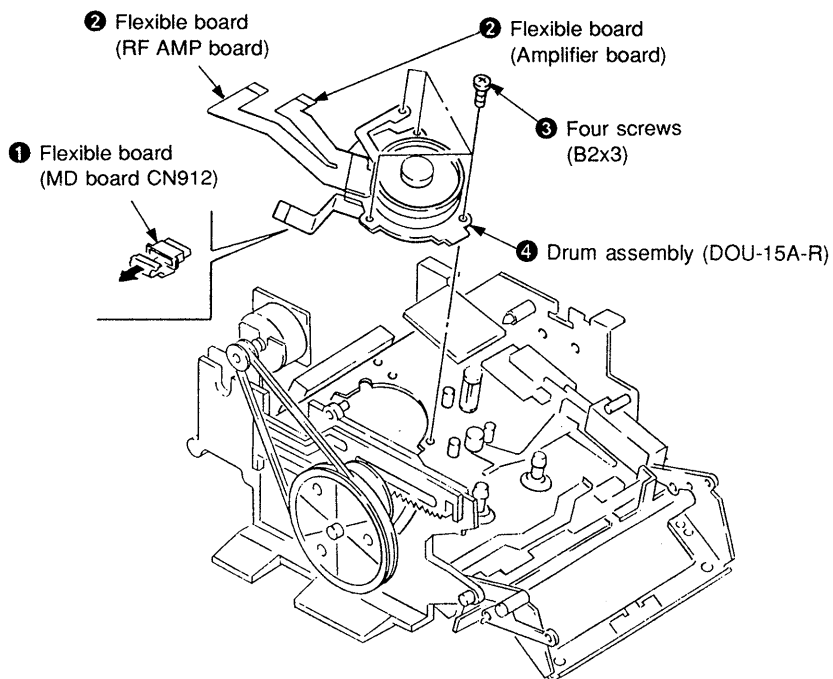
2-3. REMOVAL OF MECHANISM DECK



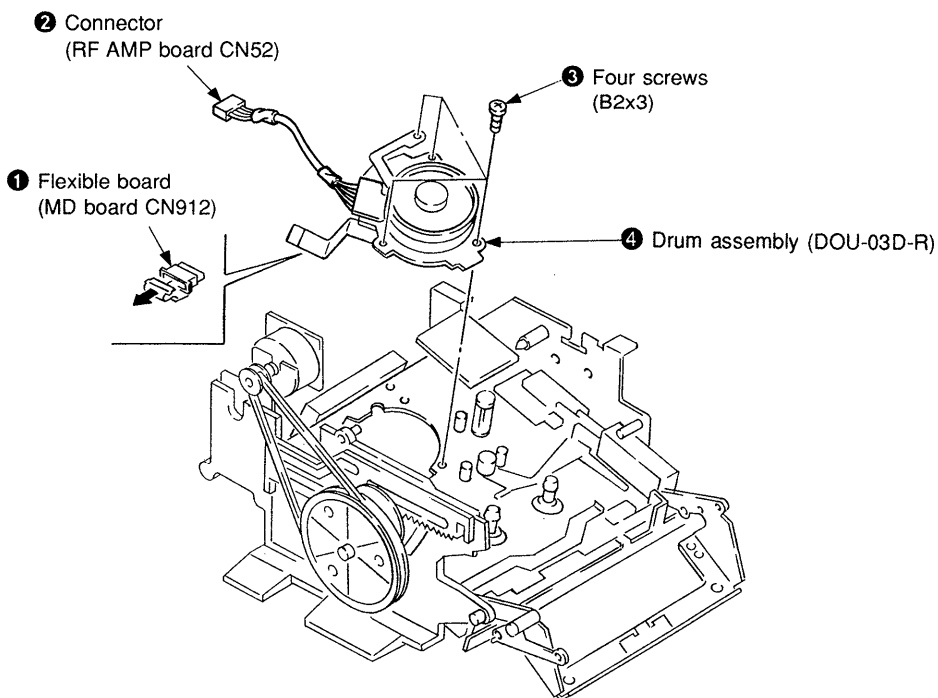
2-4. REMOVAL OF CASSETTE HOLDER ASSEMBLY



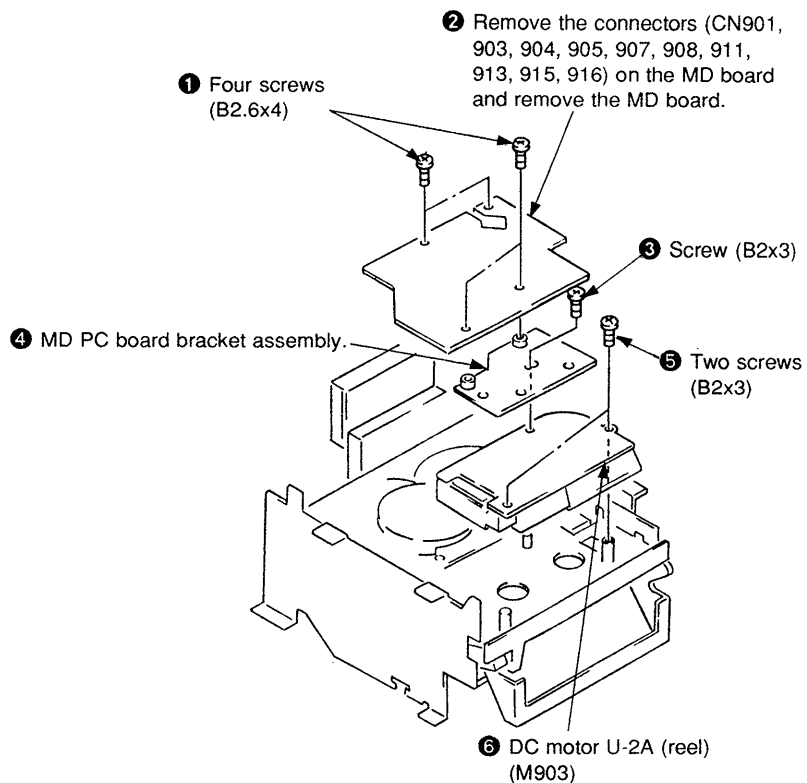
2-5. REMOVAL OF DRUM ASSEMBLY (DOU-15A-R) (US, AEP MODEL)



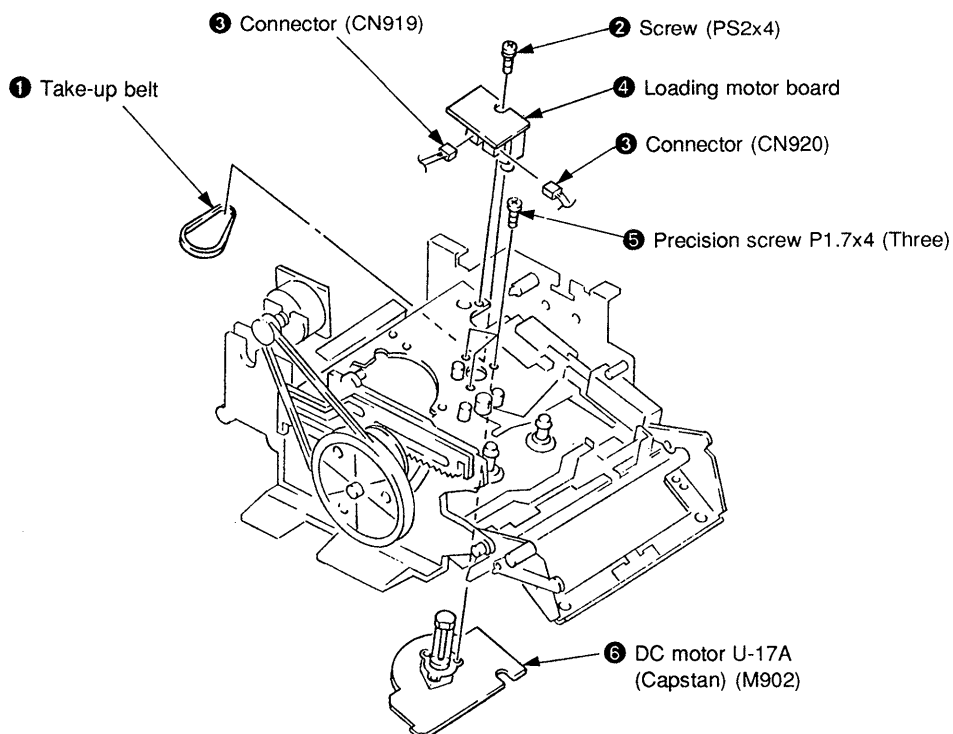
REMOVAL OF DRUM ASSEMBLY (DOU-03D-R) (G MODEL)



2-6. REMOVAL OF MD BOARD, DC-MOTOR U-2A (REEL) (M903)



2-7. REMOVAL OF LOADING MOTOR BOARD, DC MOTOR U-17A (CAPSTAN) (M902)



SECTION 3 ADJUSTMENTS

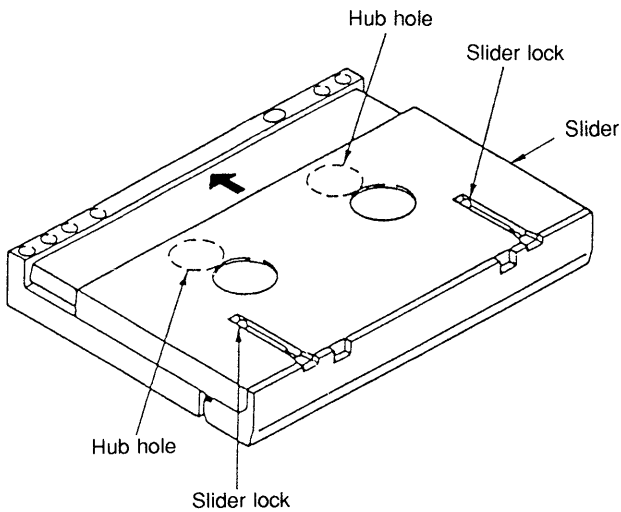
[Notes When Making Adjustments]

1. Adjustments should be performed in the order listed.
2. Use the following test tapes:
 - TY-7111 (8-909-812-00)Level
 - TY-7252 (8-909-822-00)Tracking
 - TY-7551 (8-909-814-00)Functions
 - TY-30B (8-892-358-00)Blank

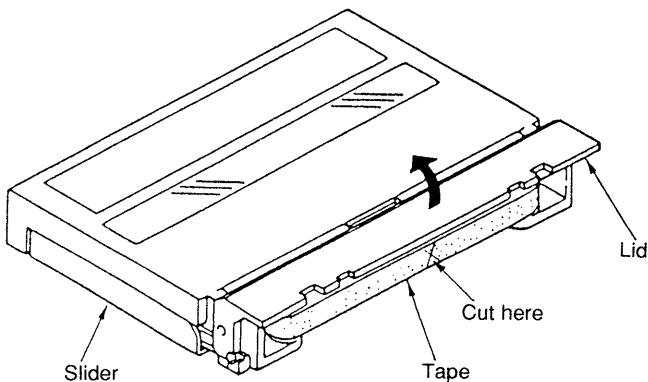
Use the following torque meter:
TW-7131 (8-909-708-71)FWD

3. Switches and controls should be set as follows unless otherwise specified.
 - TIMER switch : OFF
 - REC MODE switch : LONG
 - INPUT switch : OPTICAL
 - REC LEVEL control : Min
 - PHONES LEVEL control : Min

4. Making an end sensor cassette
 - (1) Press the tape slider lock and move the slider in the direction indicated by the arrow.



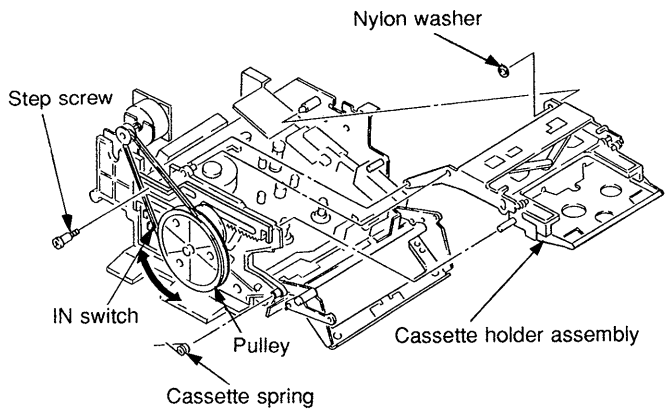
- (2) Open the lid and cut the tape.



- (3) Turn the hubs until the tape is completely inside the cassette (both T and S sides).
The end sensor cassette for the end sensor adjustments is now ready for use.

5. Be careful not to move RV1 to RV4 on the RF AMP (REC/PB) board in the mechanism assembly.
6. To adjust the tape path and guides, remove the holder assembly as shown in the diagram and use the DAT holder jig (J-8000-002-A). This will make it easier to perform the adjustments.

- First turning the pulley counterclockwise to set it into the loading OUT state will make it easier to remove and reattach the holder assembly.
- To perform the adjustments, turn the pulley clockwise to set it into the loading IN state, load the cassette tape and set the IN switch to ON.



7. Test mode
 - To set the test mode, short-circuit between the check land FXTEST and GND on the main board. At this time, "ADE" will be shown blinking on the FL display.

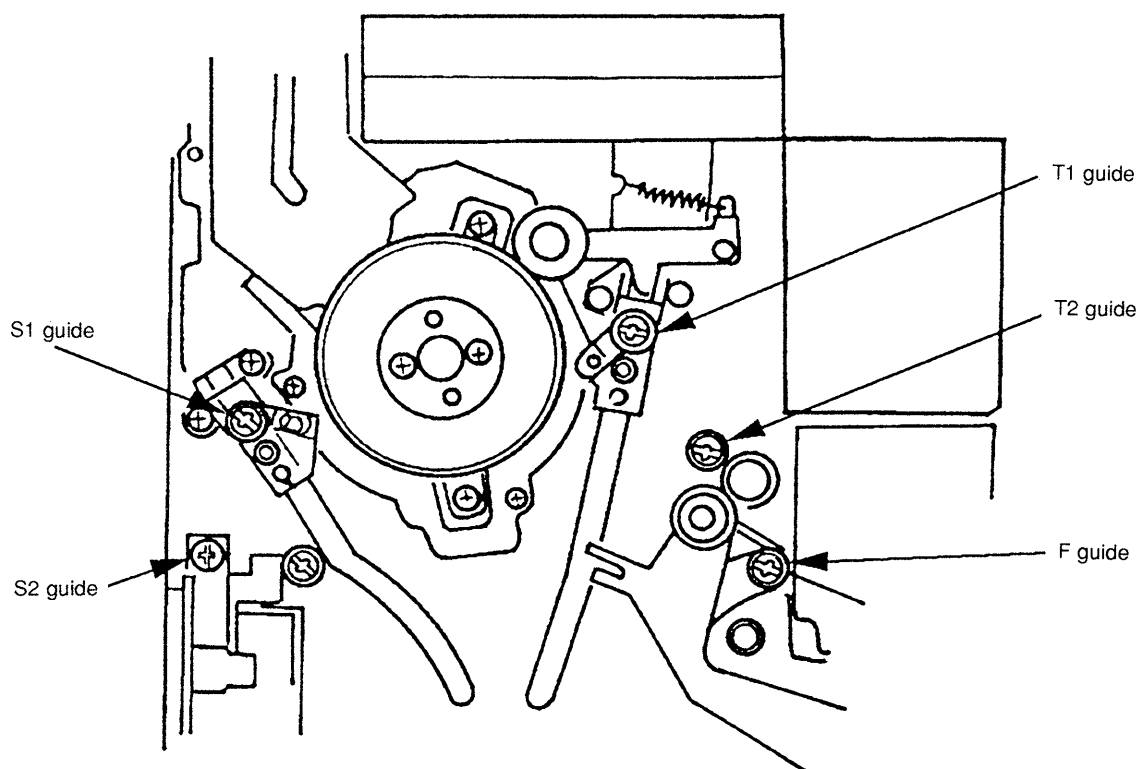
Test mode (Short-circuit between XTEST and GND)

- ① Turn on the "DPG" at the left side of the display.(press the AMS >>> key)
 - 2, T2, F guide adjustment
 - End sensor adjustment
 - Tape path adjustment
 - DPG adjustment
 - ATF pilot adjustments
- ② Turn on the "TORQUE" at the left side of the display. (Press the FWD key.)
 - FWD torque adjustments
 - FWD back tension adjustments
 (Torque setting mode)

- To exit the test mode, remove the short-circuit between XTEST and GND. After completing the adjustment, be sure to exit the test mode.

8. After completing the adjustment, refer to the following section for the tape speed check.
- (1) Set the REC MODE switch to STANDARD and check that recording and playback are carried out properly. (x1)
 - (2) Set the REC MODE switch to LONG and check that recording and playback are carried out properly. (x0.5)
 - (3) Check that friction sounds are produced when CUE (▶+▶) and REVIEW (▶+◀) are pressed. (x3, x8)
 - (4) Check that the time displayed after FF (▶▶) and REV (◀◀) is correct. (x16)
 - (5) Check that SEARCH (▷▷, ◁◁) is carried out properly.

[Adjustment Parts Location]
— Mechanism Assembly —



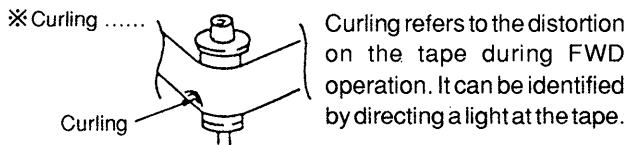
3-1. MECHANICAL ADJUSTMENTS

After replacing the drum or related parts, adjust the S2, T2, and F guides and then perform the tape path (x1.5 FWD mode) fine adjustment in electrical adjustments.

[S2, T2/F Guide Adjustment]

Adjustment Procedure :

1. Set the test mode and load the test tape TY-7252 (8-909-822-00).
2. Set the MONITOR switch to STANDARD (ATF : OFF) and press the AMS (▶▶) key.
Check that there is no curling at the upper or lower flange of S2, T2, or F guides in the FWD mode.
If there is curling, return the S2, T2, and F guides to a higher position and adjust by screwing them in.



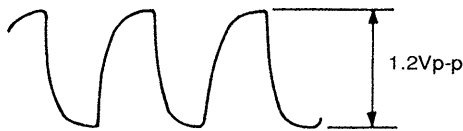
3-2. ELECTRICAL ADJUSTMENTS

[End Sensor Adjustment]

Perform the following adjustment when the holder has been removed or the mechanism deck section replaced.

Adjustment Procedure :

1. Connect the oscilloscope to pin ② of CN915 (S side) and Pin ⑥ of CN901 (T side) of the MD board.
2. Set the test mode, load the end sensor cassette, and set the STOP (■) mode.
3. Adjust RV902 (S side) and RV901 (T side) of the MD board so that the p-p value of the waveform of the oscilloscope becomes 1.2 Vp-p.



Adjustment Point : MD board

[FWD Torque Adjustment]

Adjustment Procedure :

1. Set the torque measuring mode (in the test mode, "TORQUE" lights up at the left side of the display) and load the FWD torque meter TW-7131 (8-909-708-71).
2. Set the PLAY (▶) mode.
3. Press and adjust the FF/REW button so that the minimum FWD torque (T side take up torque) value is 13 g • cm to 13.5 g • cm .
4. Confirm that the value indicated by the torque meter remains for one full cycle.
5. Confirm that the maximum value is below 16 g • cm.

[FWD Back Tension Adjustment]

Adjustment Procedure :

1. Set the torque measuring mode (in the test mode, "TORQUE" lights up at the left side of the display) and load the FWD torque meter TW-7131 (8-909-708-71).
2. Set the PLAY (▶) mode.
3. Press and adjust the AMS button so that the back tension (S side) is 8 g • cm to 8.5 g • cm .
4. Confirm that the value indicated by the torque meter remains for one full cycle.
5. Confirm that the maximum value is below 9.5 g • cm.

[REV Torque, REV Back tension Check]

1. After the FWD torque, back tension adjustment, press PLAY (▶) once more and set the REV (◀) mode.
2. Confirm that the REV torque is 13.5 g • cm to 17.5 g • cm and the REV back tension is 7.5 g • cm to 11.5 g • cm.

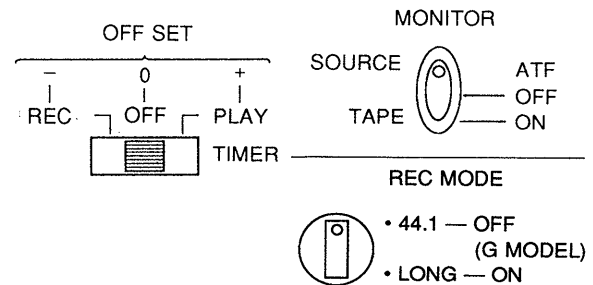
[Tape Path Fine Adjustment (x1.5 FWD Mode)]

Perform the following adjustment when the drum has been replaced.

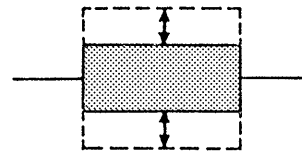
Adjustment Procedure :

1. Connect CH-1 terminal of the oscilloscope to the checkland PB RF0 (M-RF) of the main board and the CH-2 terminal to SWP-M.
2. Set the test mode and load the test tape TY-7252 (8-909-822-00).
3. Press the AMS (▶▶) key.

Role of Switches in Test Mode

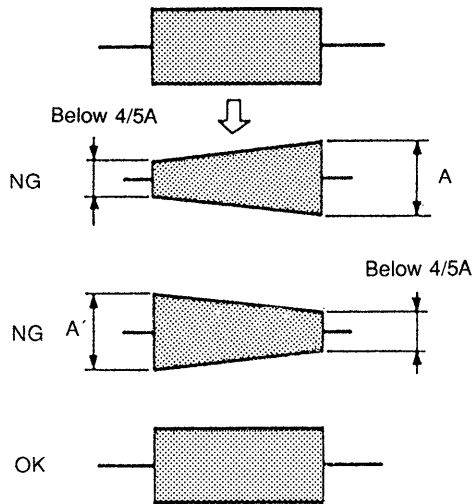


4. With the MONITOR switch set to SOURCE (ATF : OFF), TIMER switch set to REC or PLAY (OFFSET : + or —), adjust the S1 guide and T1 guide finely so that the oscilloscope RF signal waveform remains the same when high-low is repeated.

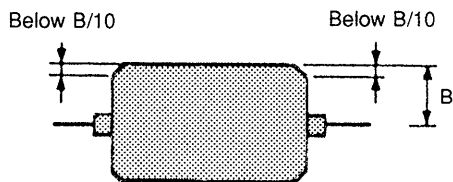


- ※ Finish the adjustment by screwing in. If there is curling at the upper or lower flange of the S3, T2, or F guide, perform the guide adjustment.

5. With the MONITOR switch set to TAPE (ATF, ON) and TIMER switch set to REC or PLAY (OFFSET : + or -), check the RF signal waveform.



6. With the MONITOR switch set to TAPE (ATF, ON) and TIMER switch set to REC or PLAY (OFFSET : 0), check the RF signal waveform.
- (1) Confirm that the RF signal waveform peak value (B) is above 60 Vm.
 - (2) Confirm that the undershoot level of the RF signal waveform flat portion is within 10%.



7. When the measured values are not within the above specifications, repeat steps 3 to 6 above.

Adjustment Point : Mechanism assembly

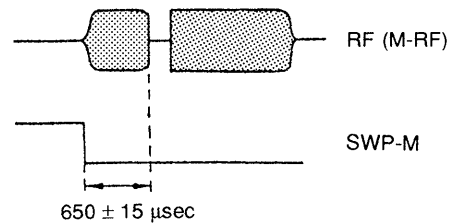
[DPG Adjustment]

Be sure to perform the following adjustment when the drum has been replaced.

Adjustment Procedure:

1. Connect the CH-1 terminal of the oscilloscope to the checkland PB RF0 (M-RF) of the main board and the CH-2 terminal to SWP-M.
By triggering the CH-2 and inverting its signal, the signal will synchronize with the falling edge.
2. Set the test mode and load the test tape TY-7252 (8-909-822-00).
3. Set the MONITOR switch to TAPE (ATF : ON) and TIMER switch set to OFF (OFFSET : 0).
4. Press the AMS (▷◁) key.
5. Press PLAY (▶).
6. "DPG OK" will be shown at the left side of the display.

Confirm that the gap between the SWP signal and RF signal of the oscilloscope is $650 \pm 15 \mu\text{sec}$.



3-3. CHECKS AND ADJUSTMENTS FOR DATE FUNCTION

[Clock IC Back-up Check]

- The clock will be reset if the pattern around the lithium battery (BT601) or the clock IC (IC662) has been short-circuited, or the panel L board connector CN605 disconnected when the front panel assembly was removed.

[The DATE display will show [--^d--^m--] [--^h--^m--^s] even if the PRESET button is pressed.]

At this time, check the back-up function according to the following procedure.

- (1) Connect the DC voltmeter + terminal to Pin ③ of CN608 (VOLT) and – terminal to Pin ② (CUR) on the battery board.
- (2) When the power is off, the voltage value of step (1) should be less than +30 mV.
(When the voltage becomes above +30 mV, check around IC602 or replace it.)
- (3) When the power is on, the voltage of step (1) should be less than 0 mV (–(minus) indication).
(When the voltage becomes + (plus) indication, check around D603 or replace it.)
- (4) When the above voltages are normal, set the preset date and time (year, month, day, day of the week, hour, minute, seconds) according to the instruction manual.
- (5) After setting the time in step (4), turn off the power and turn it on again after several seconds, and check that the clock works normally.

[Back-up Battery Replacement]

The life of the back-up battery in normal use (normal temperature, normal humidity) is approximately ten years or more. (In the instruction manual, it is stated as approximately 5 years.)

Take note of the following points on battery replacement.

- Correct the cause of the battery wastage by performing the above “Clock IC Back-up Check”.
 - The open-circuit voltage of the replaced battery is above 3.0 V when new. If it is less than 2.0V, it indicates that the battery has been consumed completely and must be replaced.
 - After replacing the battery, perform “Clock IC Back-up Check” again and set the time.
- * The procedure for setting time is described on page 8, 9.

[Clock Frequency Adjustment]

Note :

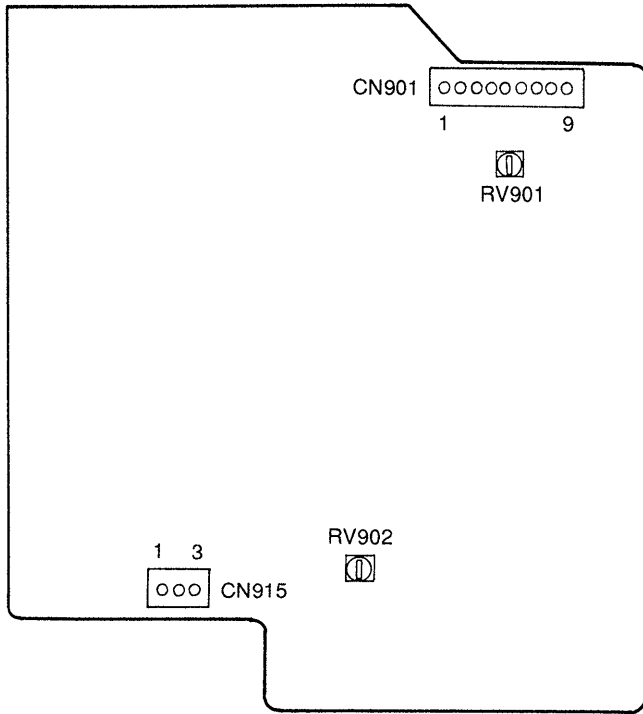
- Perform the following only when the clock frequency must be adjusted (when X602 has been replaced, etc.).
- Be sure to use a frequency counter that has more than six digits.
- This adjustment need not be performed in normal repairs. Do not rotate the trimmer capacitor CT601 on the panel L board.

Adjustment Procedure :

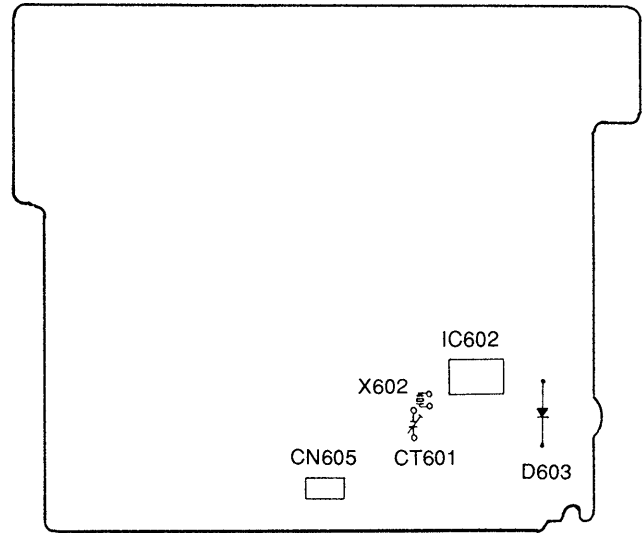
- (1) Connect the frequency counter between Pin ④ (INRT) and GND of CN608 of the battery board.
- (2) Turn the power on and adjust the trimmer capacitor CT601 so that the reading on the frequency counter becomes the following.
Specification : 2048.00 ± 0.01 Hz (in normal temperature)
(2047.99 to 2048.01 Hz)
- (3) Perform the “Clock IC Back-up Check” as described above.

Adjustment Location :

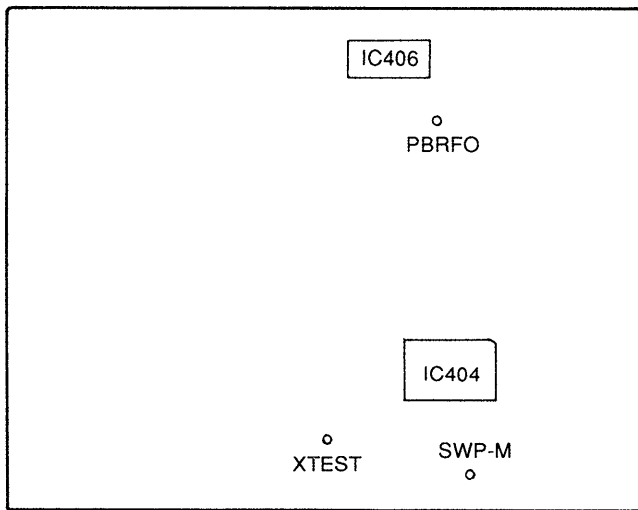
[MD BOARD] — Conductor side —



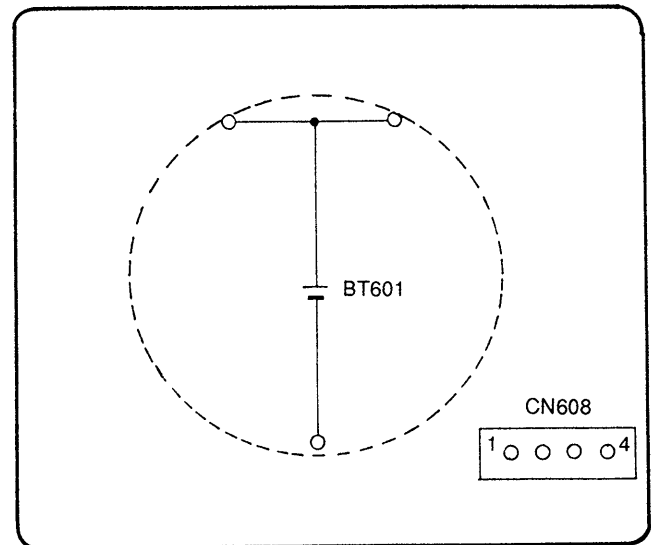
[PANEL L BOARD] — Conductor side —



[MAIN BOARD] — Component side —

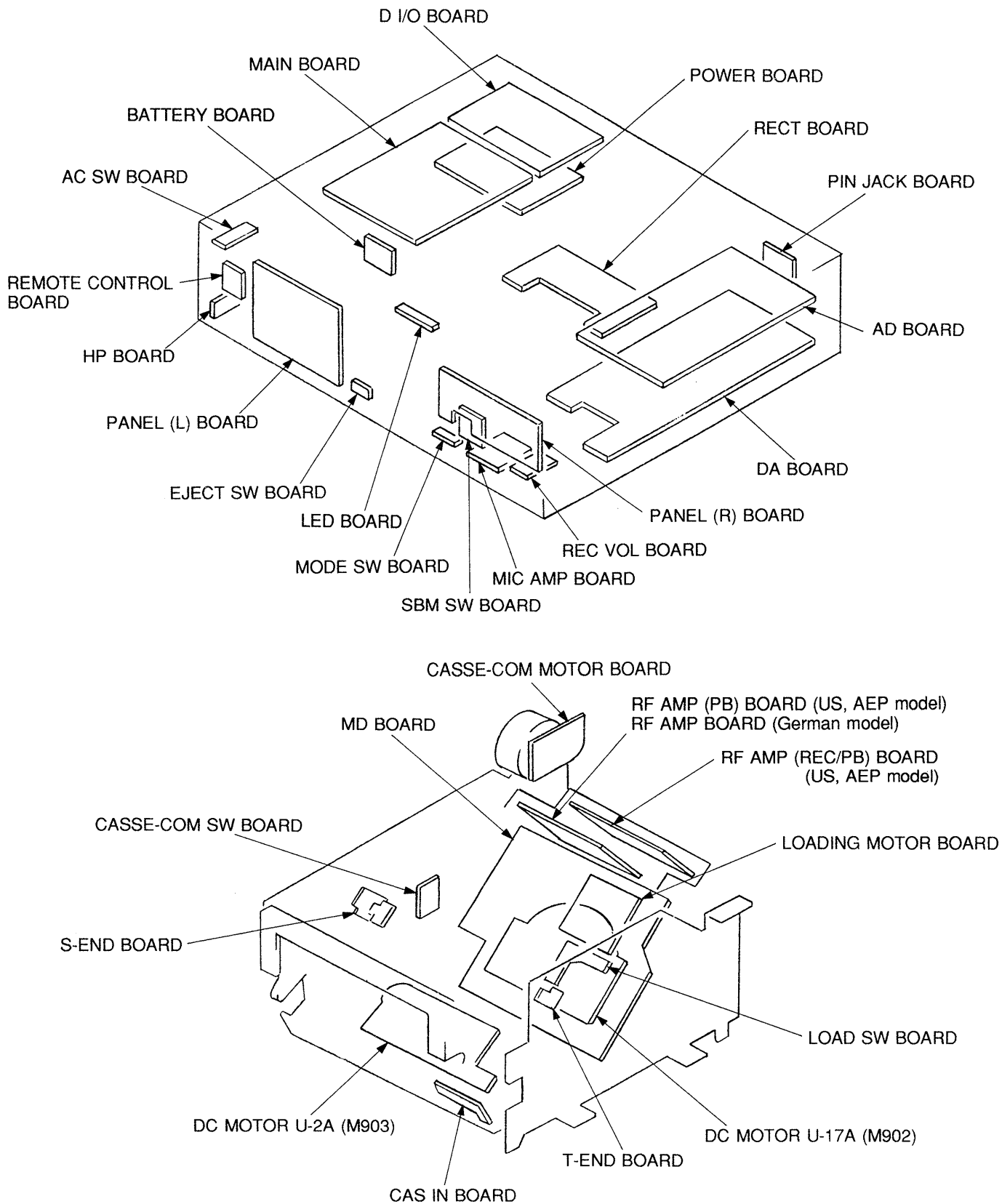


[BATTERY BOARD] — Component side —



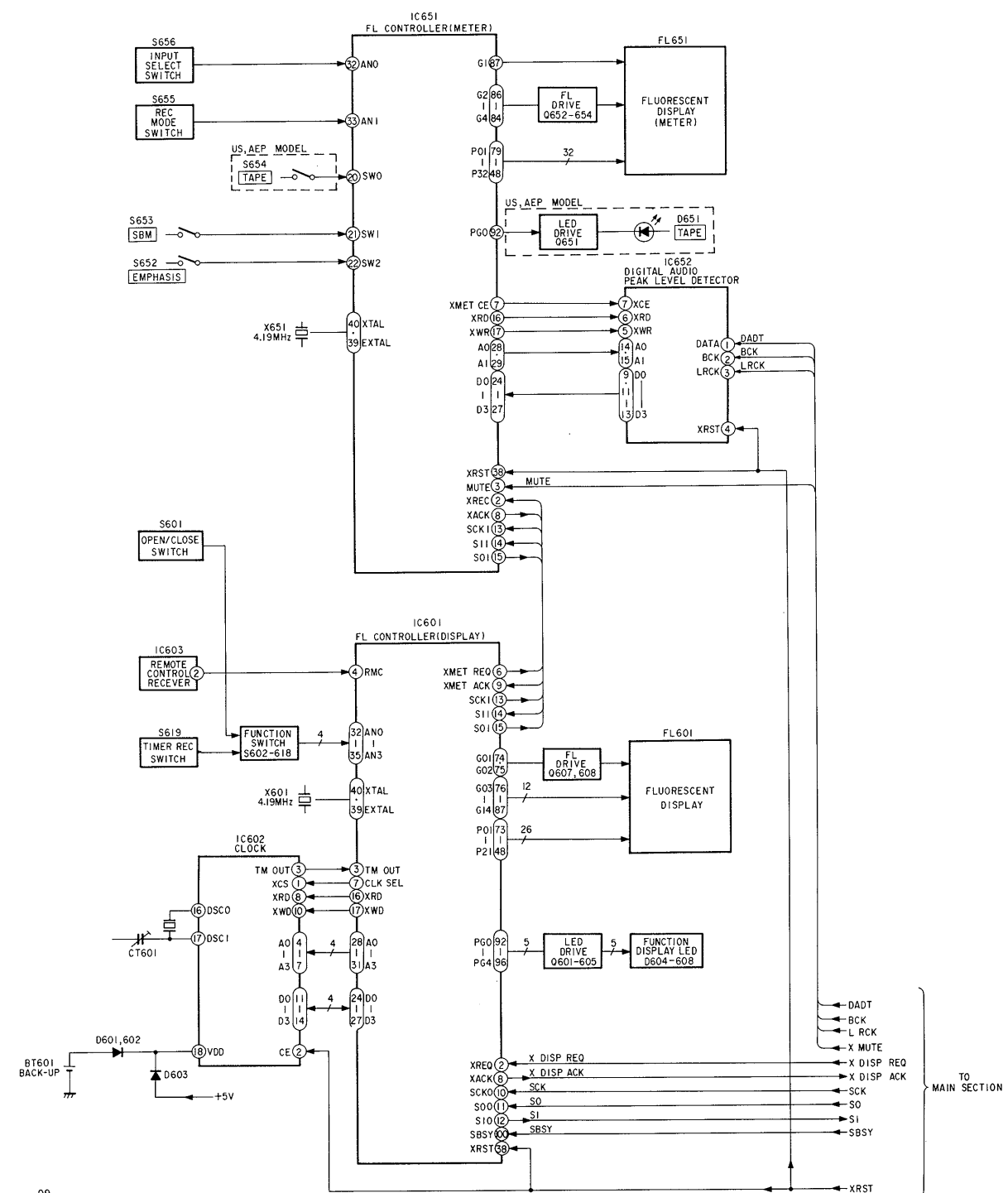
SECTION 4 DIAGRAMS

4-1. CIRCUIT BOARDS LOCATION



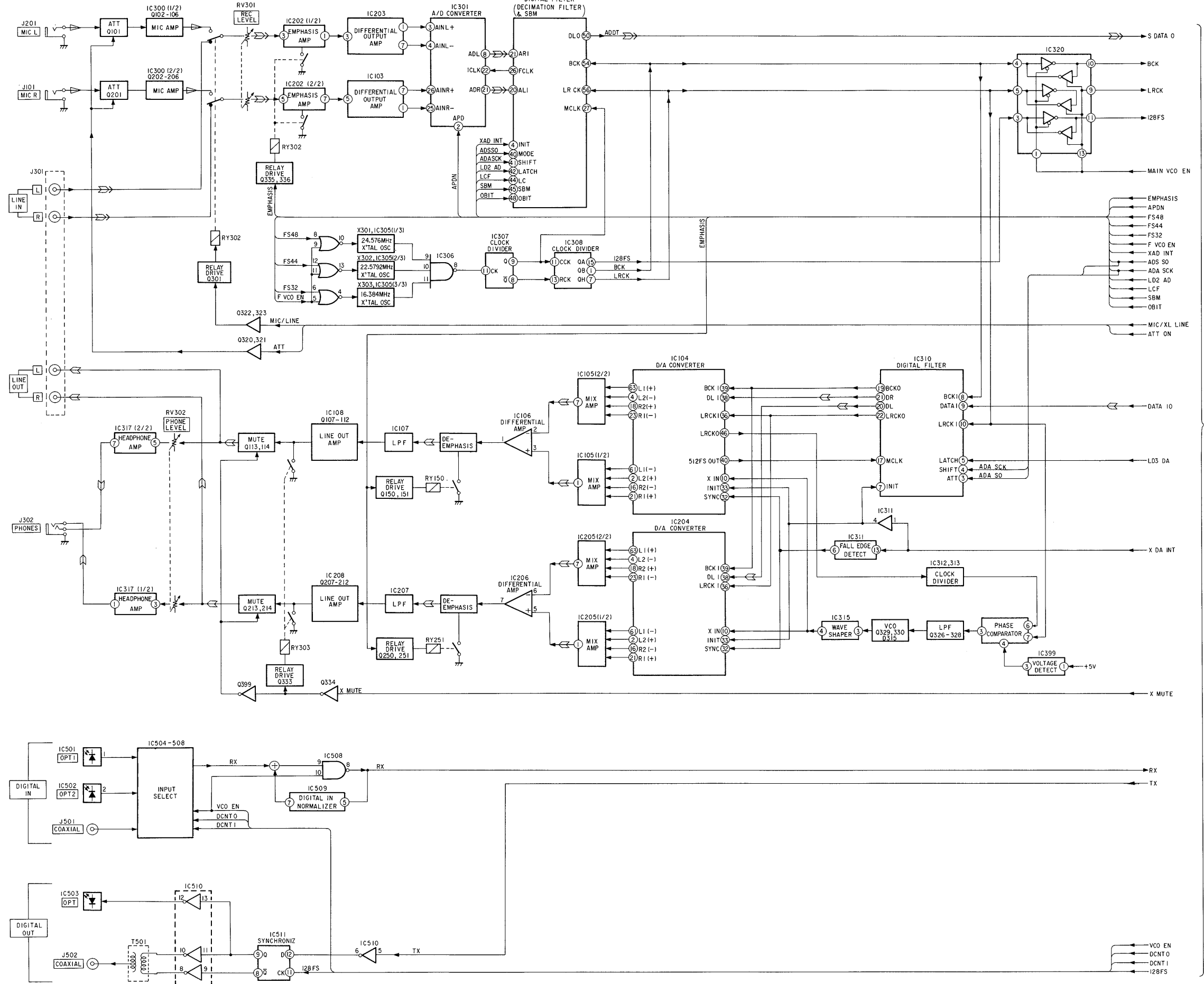
4-2. BLOCK DIAGRAMS

PANEL SECTION



09

D/A, AD SECTION



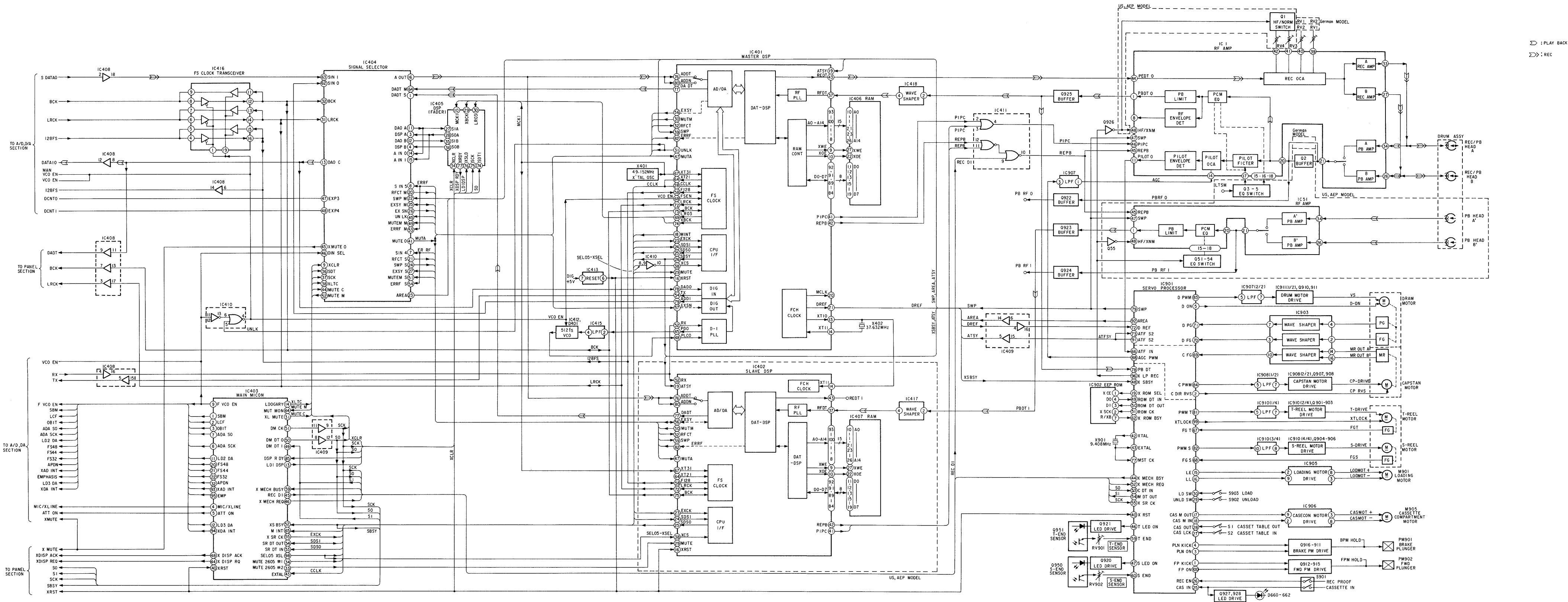
22

PLAY BACK
REC
MIC

TO MAIN SECTION

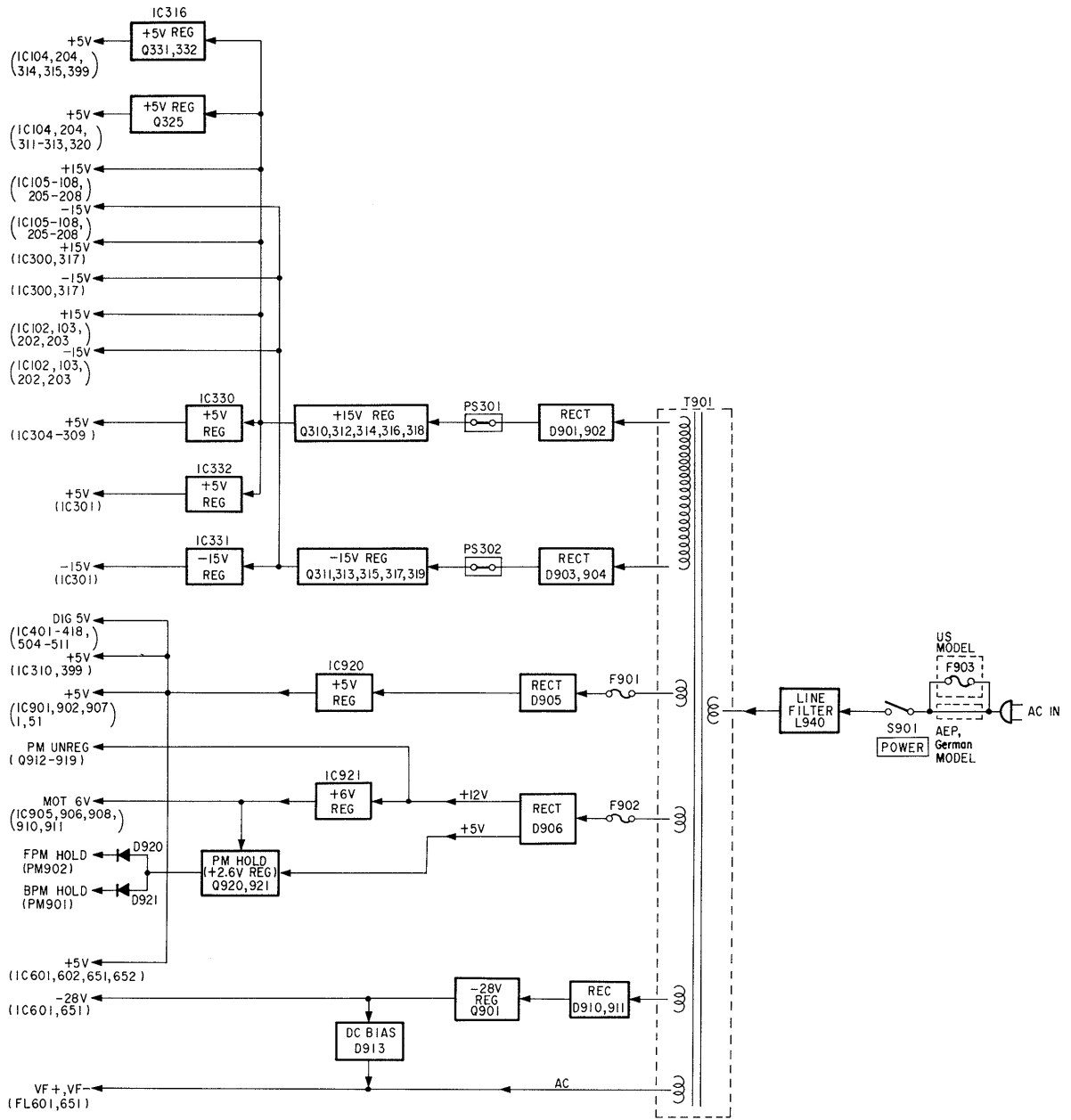
VCO EN
DCNT 0
DCNT 1
I28FS

— MAIN SECTION —



▷ : PLAY BACK
▷▷ : REC

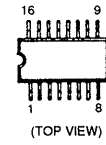
— POWER SECTION —



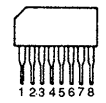
09

4-3. SEMICONDUCTOR LEAD LAYOUTS

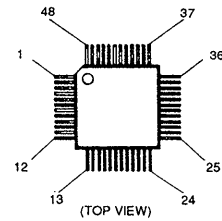
CX20115A
MSM6338MS-K
SN74HC163ANS



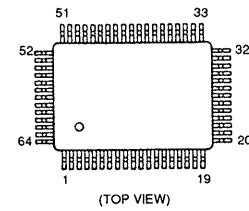
CX23065A



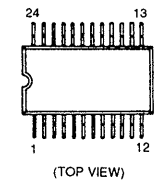
CXA1364R



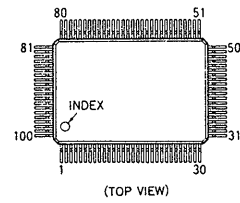
CXD2562Q
CXD8484Q



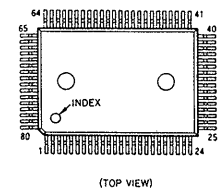
CXD2567M



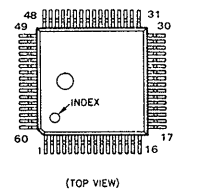
CXD2605Q
CXP82220-009Q
CXP82220-014Q
CXP87532-007Q
CXP87532-006Q



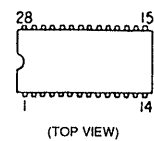
CXD2704Q



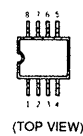
CXD8482Q



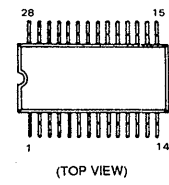
CXD8493P



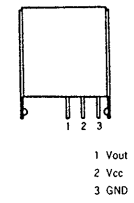
CXK1024M-ME
LM358PS
M51953BFP
TC7W00F



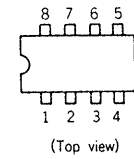
CXK58257AM-10LL



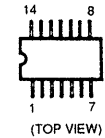
GP1U50XB



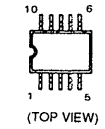
LF412CN/SL161841
M5238P
NE5532P
NJM4560D-D
UPC358C



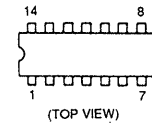
LM324NS
SN74HC02ANS
SN74HC10ANS
TC74HC242AF



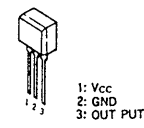
M54641FP



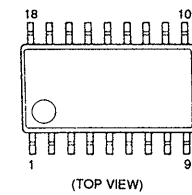
MC74HC74AN
SN74HC00AN
SN74HC10AN
SN74HCU04AN
SN74HCU04ANS



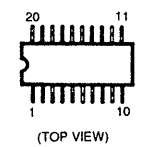
PST572E



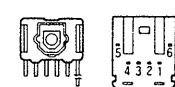
RF5C62



SN74HC74ANS
SN74HC241ANS
SN74HC244ANS

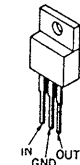


T0RX176
T0TX176

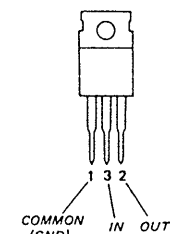


- | | |
|---------------------|------------|
| 1. OUT PUT | 1. GND |
| 2. GND ₁ | 2. LED · R |
| 3. Vcc | 3. Vcc |
| 4. GND ₂ | 4. IN |
| 5. CASE | 5. NC |
| 6. CASE | 6. NC |

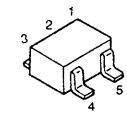
TA7805S
UPC2405HF
UPC206HF



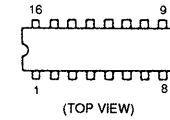
TA79005S



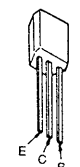
TC7SU04F



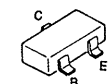
TC74HC590AF



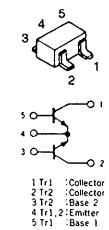
DTA114ES
DTC114ES
2SC2603-EF



DTC144EK
RN1305
2SA1162-G
2SA1510
2SC1623-L5L6



FMW2



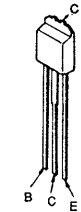
2SA1371
2SC3468-E
2SC1845-FA



2SA985A-QP
2SC2275-P
2SD2012



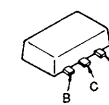
2SB1202FAST



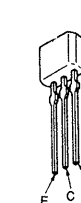
2SB734-34



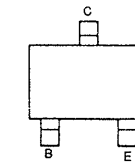
2SB798-DL
2SB1121-ST
2SD1621-ST-TC



2SC3623A-K



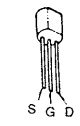
2SC4398



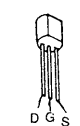
2SK241-GR



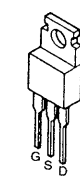
2SK246-GR1



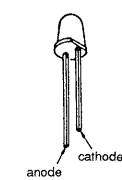
2SK369-GR



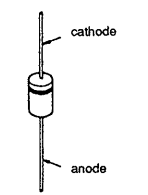
2SJ76
2SK213



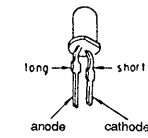
AA3432S



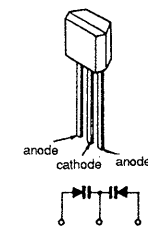
EQB01-08Q
30DF2



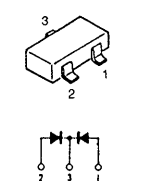
GL3PR8
LN0141C(Q)-3-LF
SEL2510W-D



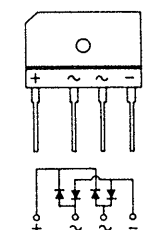
KV1260



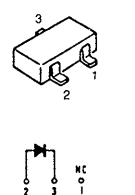
KV1550TL00



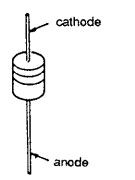
RBA-406B



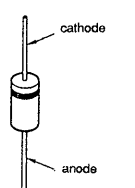
RD3.3M-B2
RD3.9M-B2



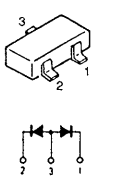
RD4.7JS-B2
RD5.1JS-B2
UZL-27H
UZP-5.6BB



10E2N
1N4148M
1SS106

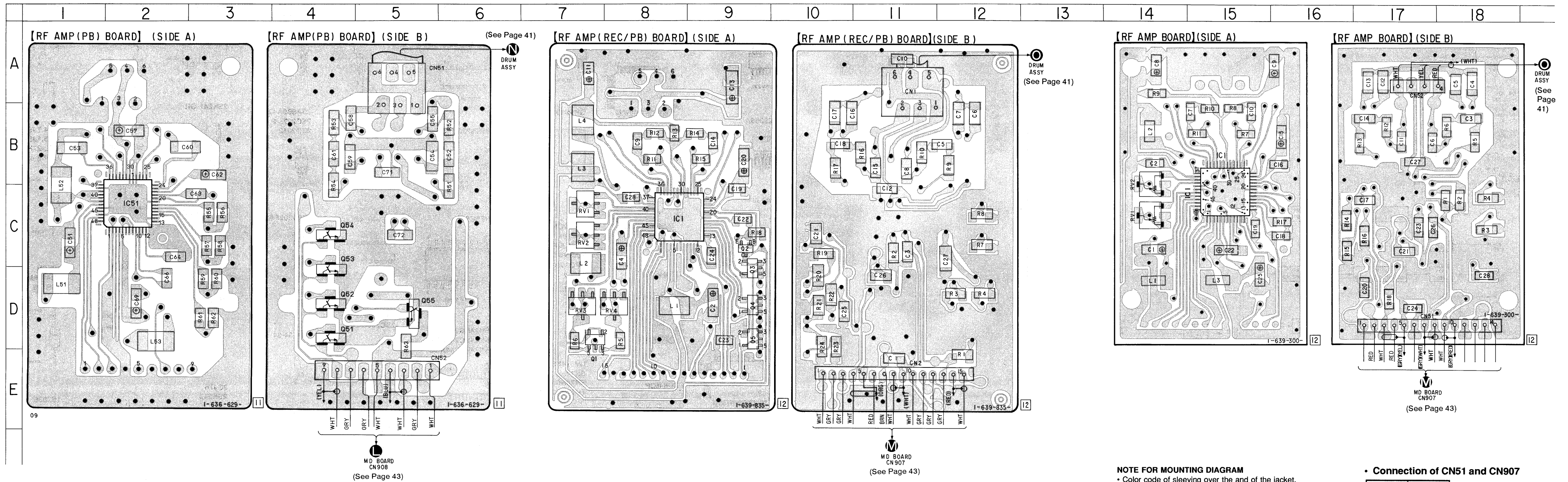


1S2836



4-4. PRINTED WIRING BOARD
 — RF (US, AEP MODEL) SECTION —
 • See page 20 for Circuit Boards Location.
 • See page 28 for Semiconductor Lead Layouts.

PRINTED WIRING BOARD
 — RF (German MODEL) SECTION —
 • See page 20 for Circuit Boards Location.
 • See page 28 for Semiconductor Lead Layouts.

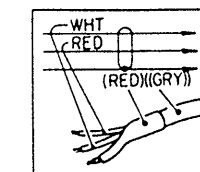


• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| IC1 | C-8 |
| IC51 | C-2 |
| Q1 | E-7 |
| Q2 | C-9 |
| Q3 | D-9 |
| Q4 | D-9 |
| Q5 | D-9 |
| Q51 | D-4 |
| Q52 | D-4 |
| A53 | C-4 |
| Q54 | C-4 |
| Q55 | D-5 |

Note:
 • ○ : parts extracted from the component side.
 • ● : Through hole.
 • [Pattern] : Pattern on the side which enable seeing.
 (The other layer's patterns are not indicated.)

NOTE FOR MOUNTING DIAGRAM
 • Color code of sleeving over the end of the jacket.



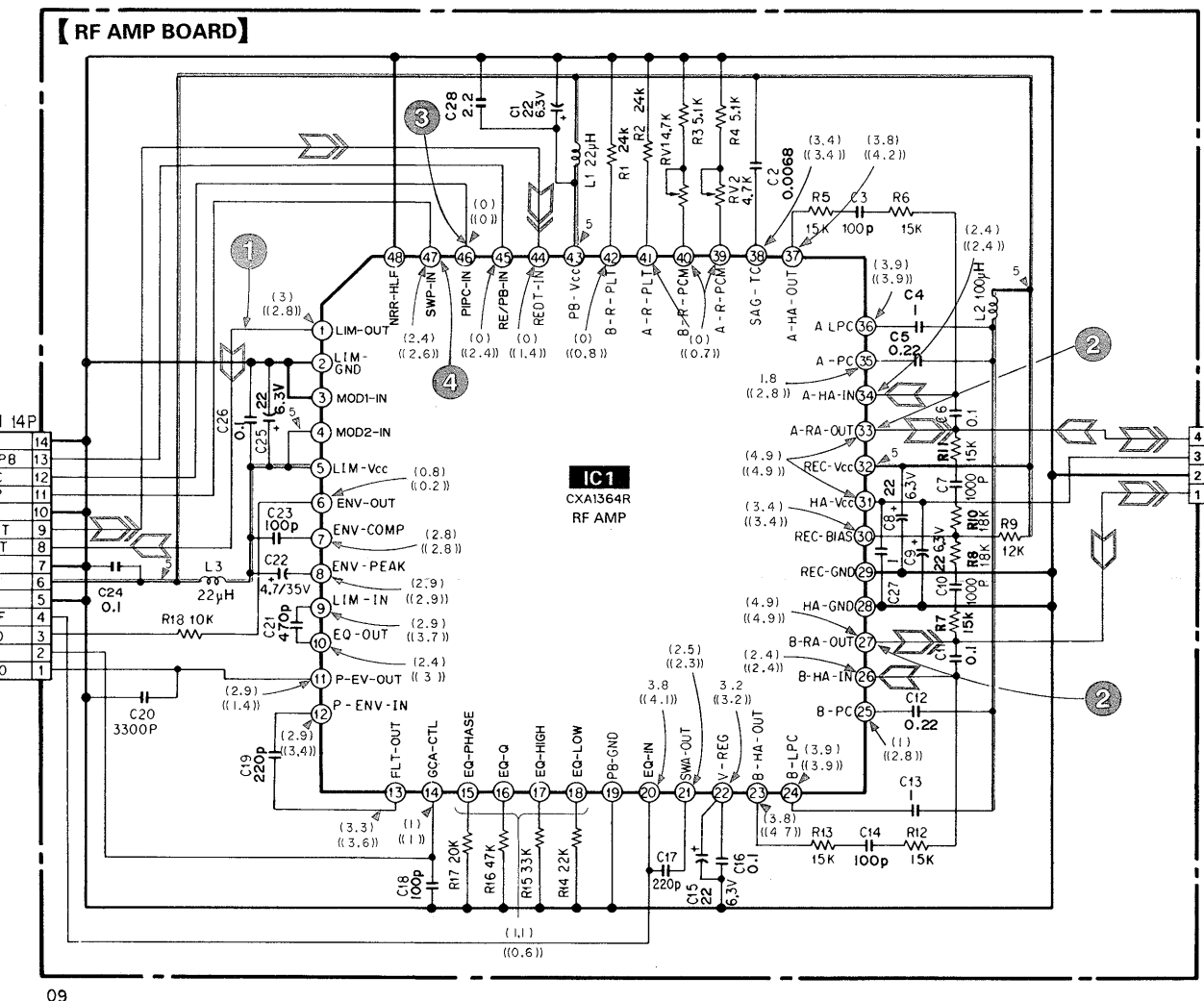
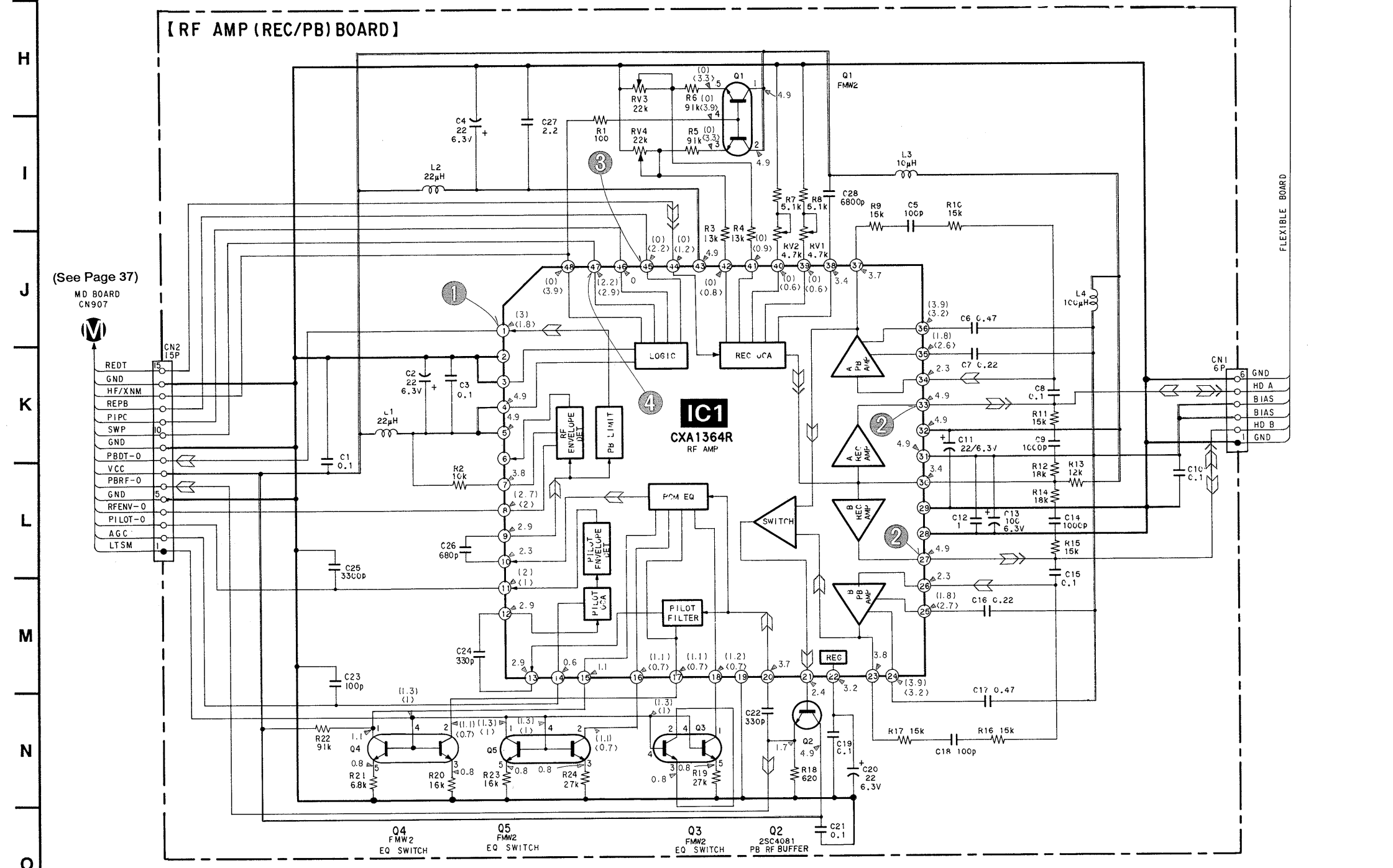
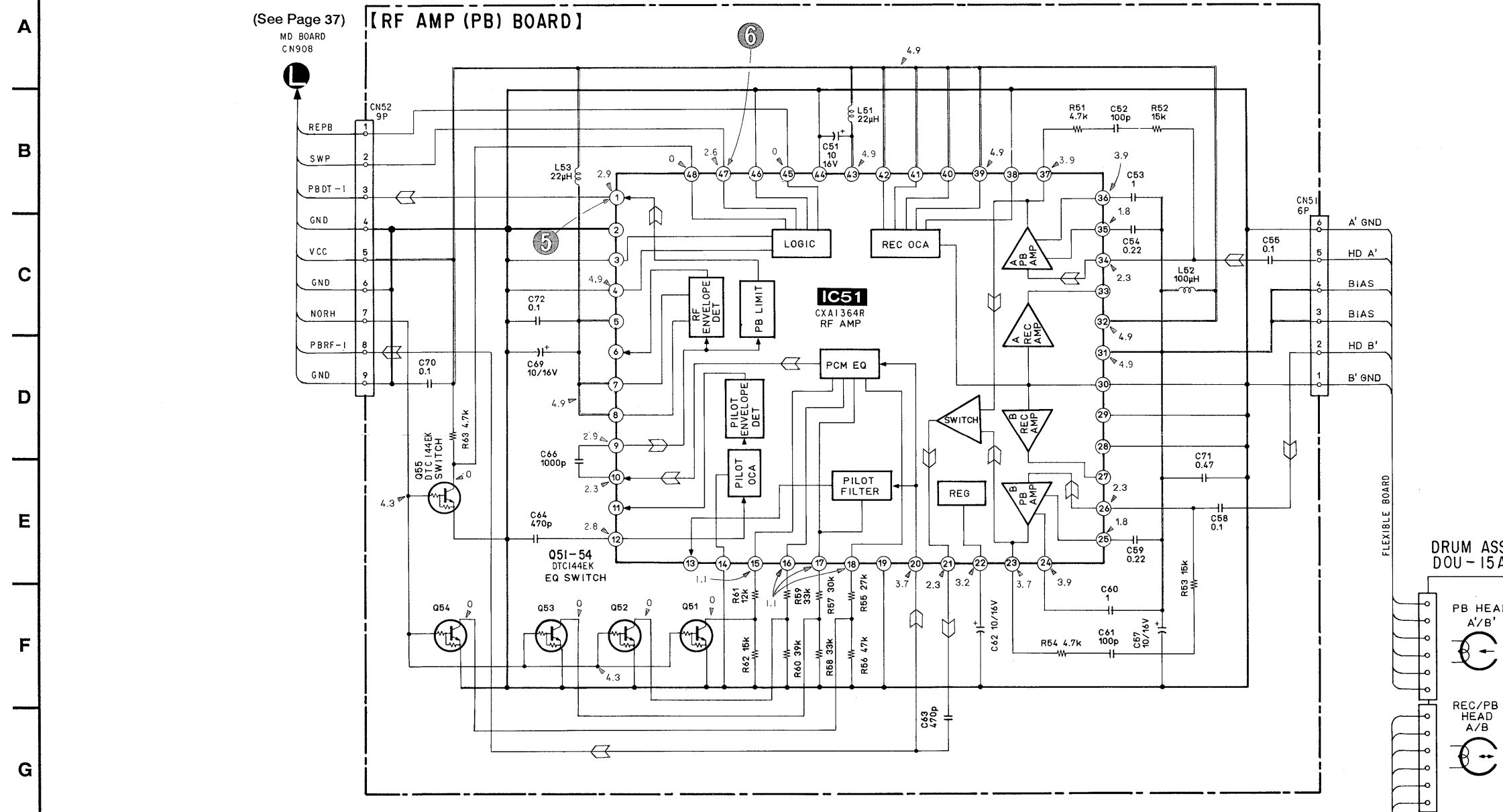
• Connection of CN51 and CN907

| RF AMP BOARD CN51 PIN No. | MD BOARD CN907 PIN No. |
|---------------------------|------------------------|
| 1 | 13 |
| 2 | 14 |
| 3 | 12 |
| 4 | 10 |
| 5 | 11 |
| 6 | 9 |
| 7 | 7 |
| 8 | 8 |
| 9 | 1 |
| 10 | NC |
| 11 | 6 |
| 12 | 5 |
| 13 | 4 |
| 14 | 2 |

4-5. SCHEMATIC DIAGRAM
— RF (US, AEP MODEL) SECTION —

SCHEMATIC DIAGRAM
— RF (German MODEL) SECTION —

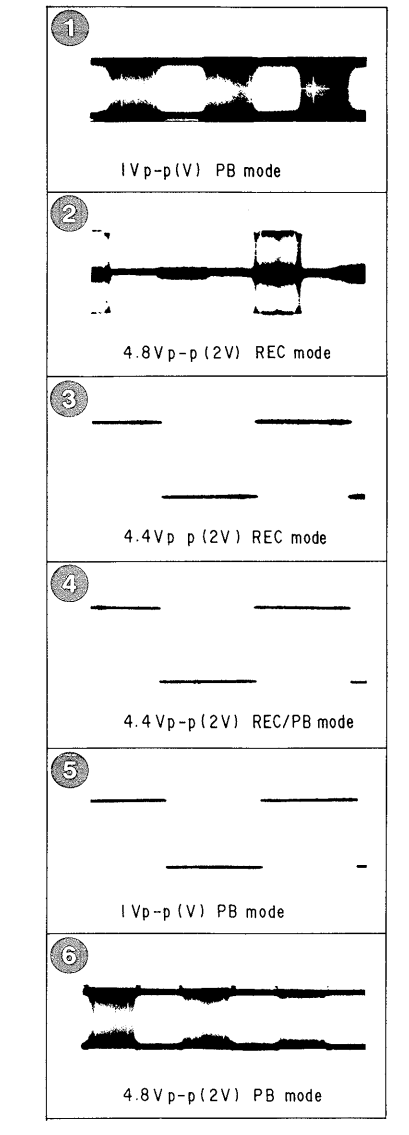
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21



• Connection of CN907 and CN51

| MD BOARD CN907 PIN No. | RF AMP BOARD CN51 PIN No. |
|------------------------------|------------------------------------|
| 2 | 14 |
| 4 | 13 |
| 5 | 12 |
| 6 | 11 |
| NC | 10 |
| 1 | 9 |
| 8 | 8 |
| 7 | 7 |
| 9 | 6 |
| 11 | 5 |
| 10 | 4 |
| 12 | 3 |
| 14 | 2 |
| 13 | 1 |

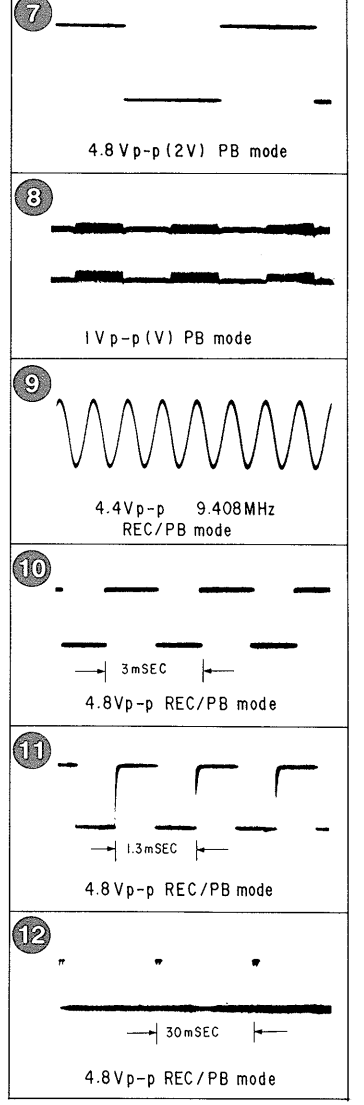
• Waveforms.



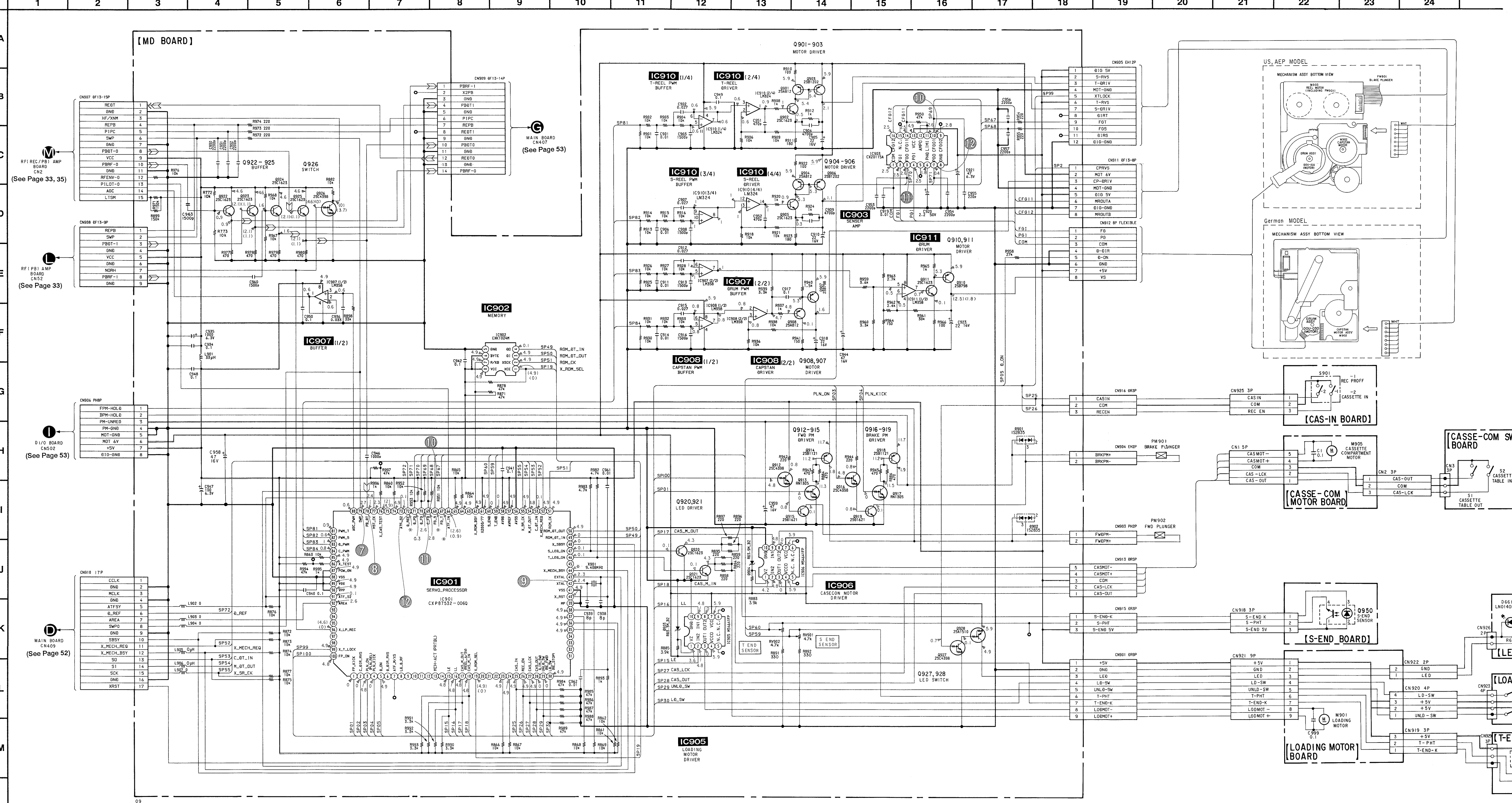
Note:

- All capacitors are in μF unless otherwise noted. pF ; μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- ====: B+ Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: REC/PB
- (): PB
- < >, (()): REC
- 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.
- Circled numbers refer to waveforms.
- Signal path.
- ====: PB
- ====>: REC

Waveforms.

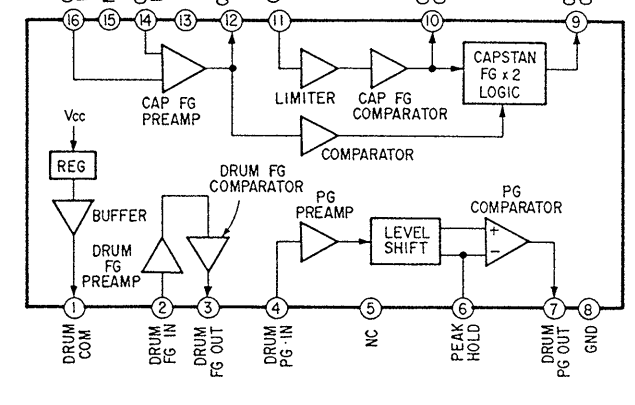


4-6. SCHEMATIC DIAGRAM - MD SECTION - See page 97 for IC Pin Functions.

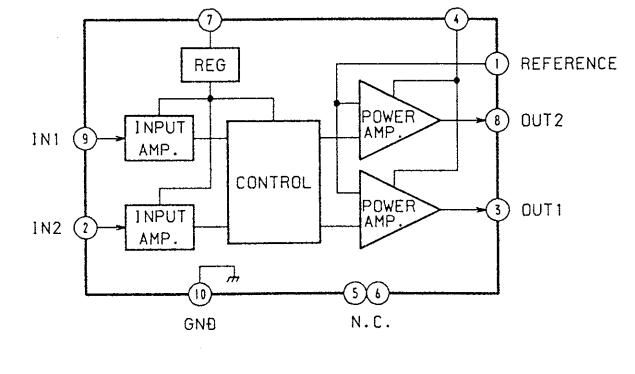


IC Block Diagrams.

IC903 CX20115A

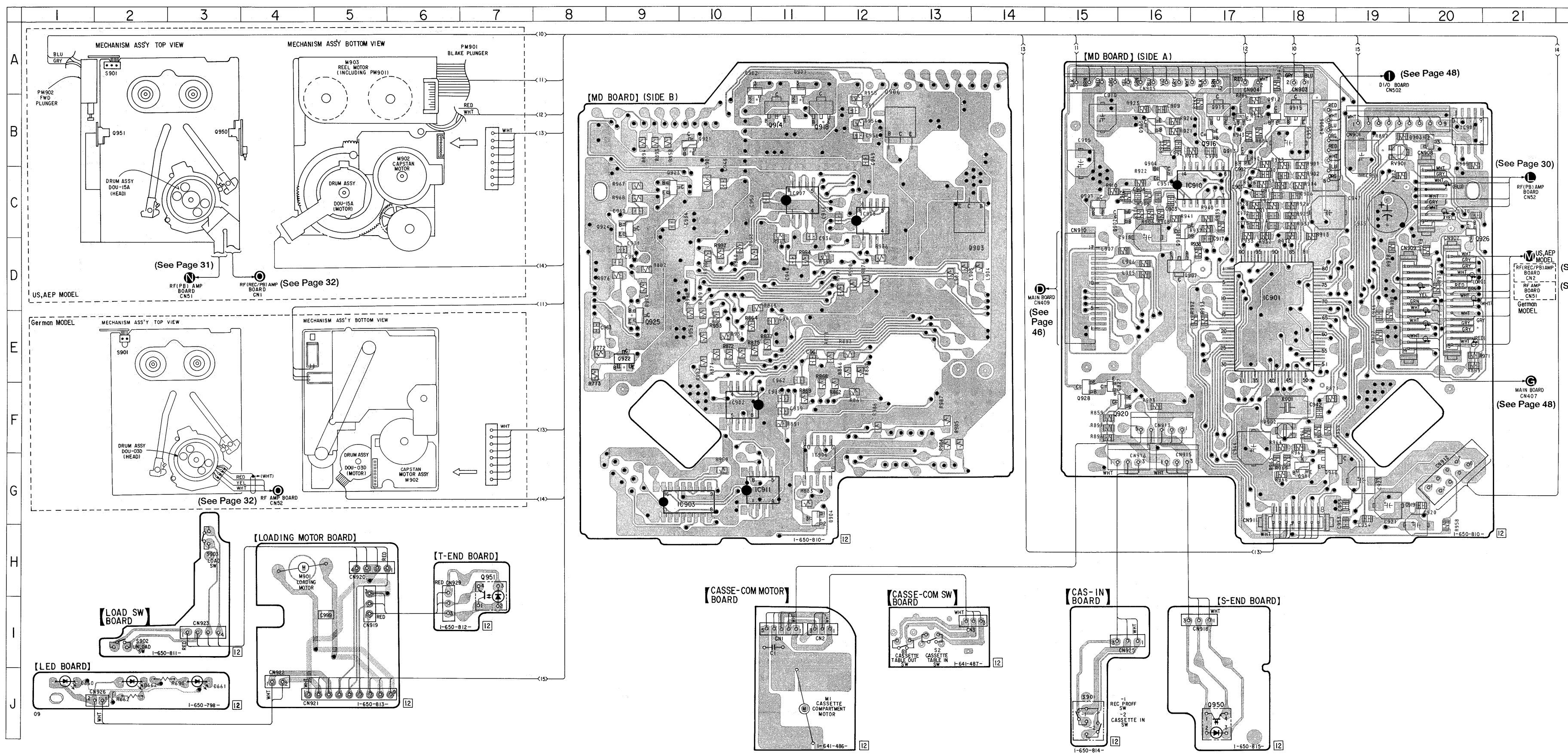


IC905, 906 M54641FP



- Note:**
- All capacitors are in μF unless otherwise noted. pF : μF 90WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4W$ or less unless otherwise specified.
 - % : indicates tolerance.
 - B+ Line
 - adjustment for repair.
 - Waveforms are dc with respect to ground under no-signal conditions. no mark : REC/PB () : REC < > : PB * : can not be measured.
 - Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
 - Voltages are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
 - Circled numbers refer to waveforms.
 - Signal path >>> : PB >>>> : REC

4-7. PRINTED WIRING BOARD
— MD SECTION —
 • See page 20 for Circuit Boards Location.
 • See page 28 for Semiconductor Lead Layouts.



• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D660 | J-1 |
| D661 | J-3 |
| D662 | J-2 |
| D901 | A-11 |
| D902 | A-11 |
| D903 | B-20 |
| D904 | G-12 |
| IC901 | D-18 |
| IC902 | F-10 |
| IC903 | G-10 |
| IC905 | B-20 |
| IC906 | G-12 |
| IC907 | C-11 |
| IC908 | C-12 |
| IC910 | C-17 |
| IC911 | G-11 |
| Q901 | C-15 |
| Q902 | C-16 |
| Q903 | C-14 |
| Q904 | C-16 |
| Q905 | B-16 |
| Q906 | B-13 |
| Q907 | D-17 |
| Q908 | D-16 |
| Q910 | G-19 |
| Q911 | G-18 |
| Q912 | B-18 |
| Q913 | B-17 |
| Q914 | B-11 |
| Q915 | B-18 |
| Q916 | B-17 |
| Q917 | B-12 |
| Q918 | B-12 |
| Q919 | B-17 |
| Q920 | F-16 |
| Q921 | B-10 |
| Q922 | E-9 |
| Q923 | C-10 |
| Q924 | C-9 |
| Q925 | E-9 |
| Q926 | C-20 |
| Q927 | F-16 |
| Q928 | F-15 |
| Q950 | J-17 |
| Q951 | H-7 |

• Connection of CN907 and CN51

| MD BOARD CN907 PIN No. | RF AMP BOARD CN51 PIN No. |
|------------------------|---------------------------|
| 1 | 9 |
| 2 | 14 |
| 3 | NC |
| 4 | 13 |
| 5 | 12 |
| 6 | 11 |
| 7 | 7 |
| 8 | 8 |
| 9 | 6 |
| 10 | 4 |
| 11 | 5 |
| 12 | 3 |
| 13 | 1 |
| 14 | 2 |
| 15 | NC |

Note:

- : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern from the side which enable seeing. (The other layer's patterns are not indicated.)
- ▩ : Pattern of the rear side.

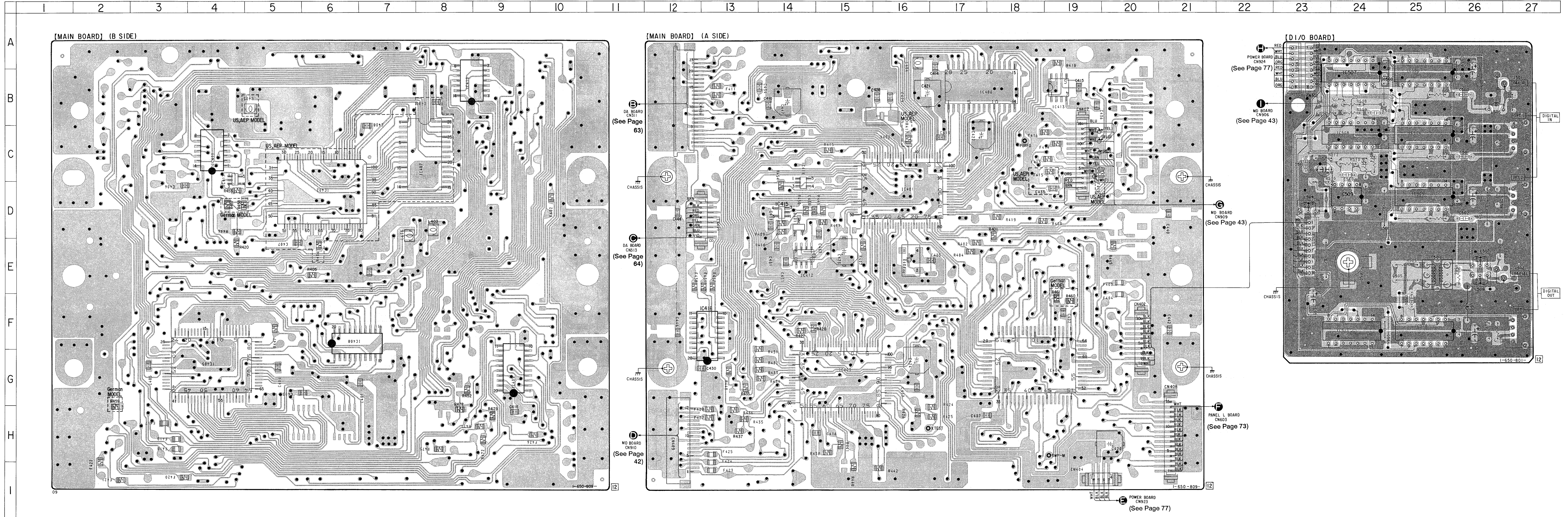
**4-8. PRINTED WIRING BOARD
— MAIN SECTION —**
 • See page 20 for Circuit Boards Location.
 • See page 28 for Semiconductor Lead Layouts.

• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D401 | D-14 |
| IC401 | D-16 |
| IC402 | D-6 |
| IC403 | G-15 |
| IC405 | G-4 |
| IC406 | B-17 |
| IC407 | C-8 |
| IC408 | F-6 |
| IC409 | G-9 |
| IC410 | B-8 |
| IC411 | C-4 |
| IC412 | E-14 |
| IC413 | B-19 |
| IC415 | D-14 |
| IC416 | F-13 |
| IC417 | C-4 |
| IC418 | C-14 |
| IC501 | C-27 |
| IC502 | D-27 |
| IC503 | F-27 |
| IC504 | C-25 |
| IC505 | D-25 |
| IC506 | B-25 |
| IC507 | B-24 |
| IC508 | C-24 |
| IC509 | D-24 |
| IC510 | F-25 |
| IC511 | F-24 |

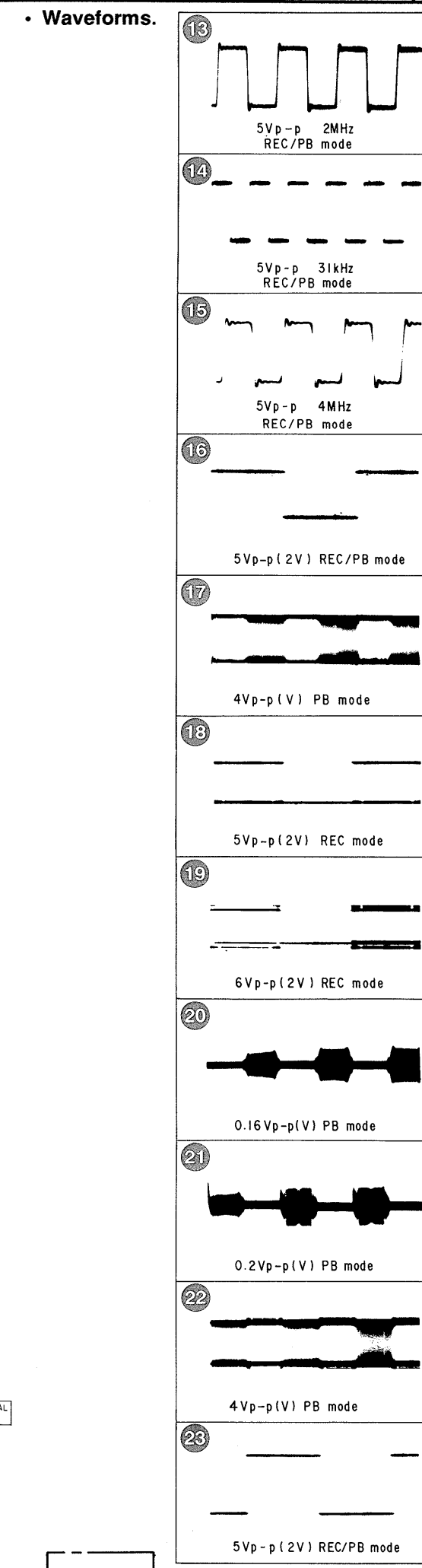
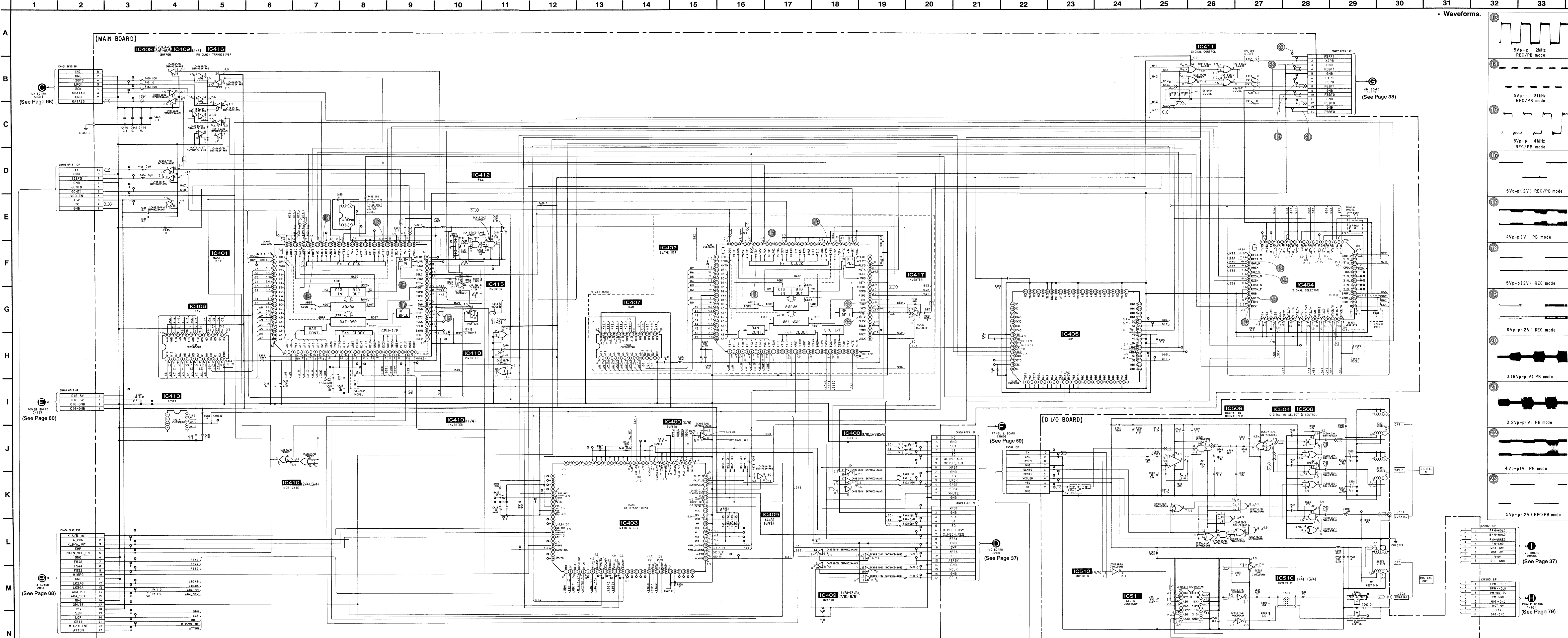
• Not mounted in German model.

Note:
 • ○ : parts extracted from the component side.
 • ● : Through hole.
 • △ : internal component.
 • ▨ : Pattern on the side which enable seeing.
 • ▩ : Pattern of the rear side.

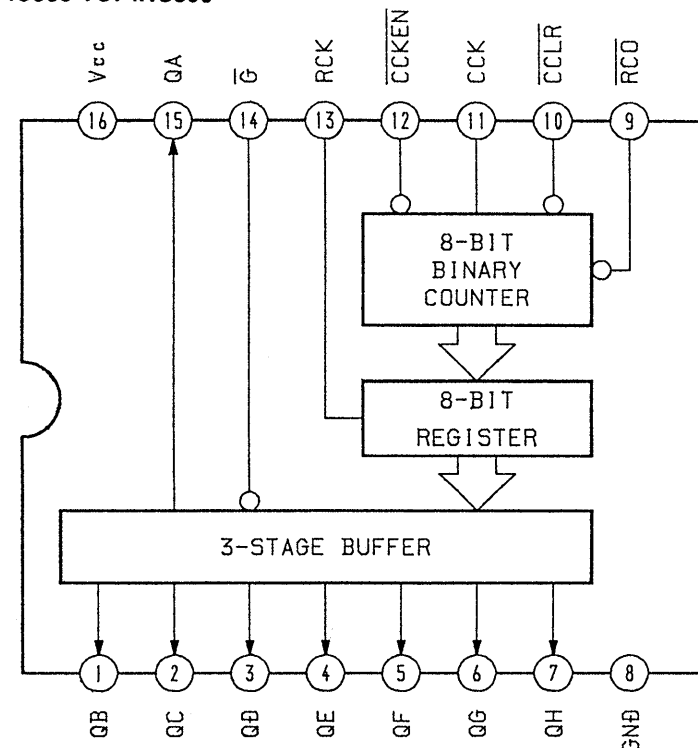


4-9. SCHEMATIC DIAGRAM
— MAIN SECTION —
• See page 84 for IC Pin Functions.

- Note:**
- All capacitors are in μF unless otherwise noted. pF or μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4W or less unless otherwise specified.
 - % : indicates tolerance.
 - Δ : internal component.
 - \square : panel designation.
 - : B+ Line
 - Voltage and waveforms are dc with respect to ground under no-signal conditions.
 - no mark : REC/PB
 - () : REC
 - < > : PB
 - * : can not be measured.
 - Voltagess 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.
 - Circled numbers refer to waveforms.
 - Signal path.
 - Σ : REC

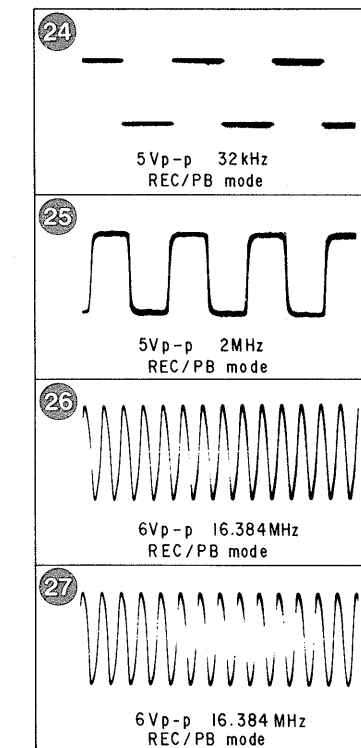


• IC Block Diagram.
IC308 TC74HC590

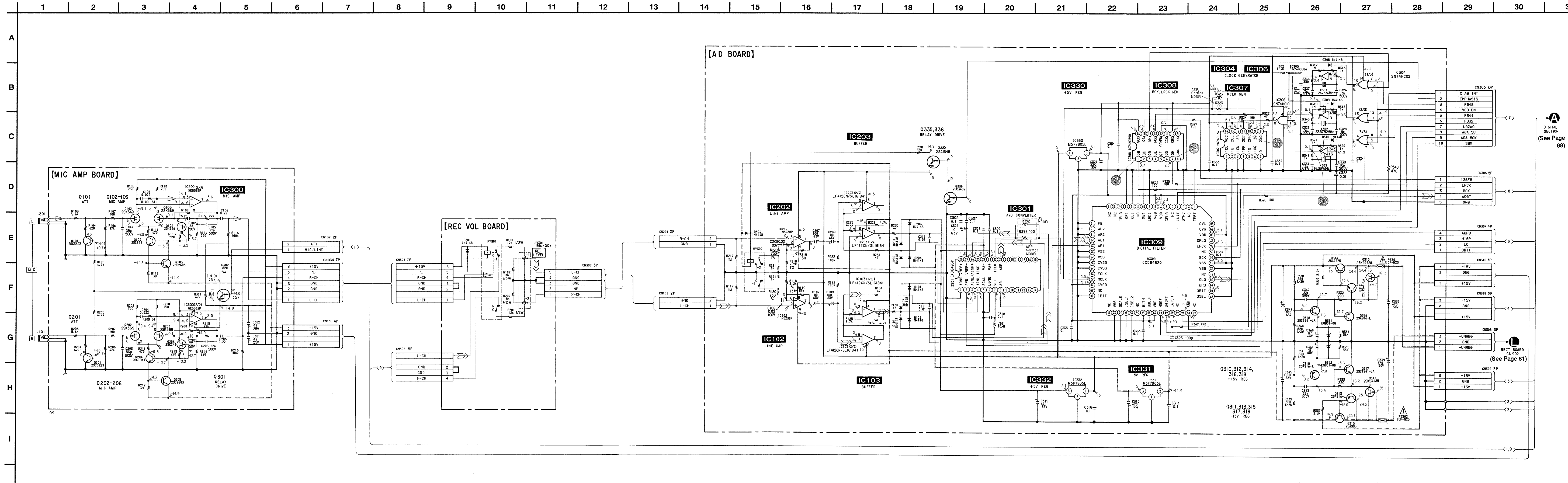


4-10. SCHEMATIC DIAGRAM
— AUDIO SECTION —

• Waveforms.

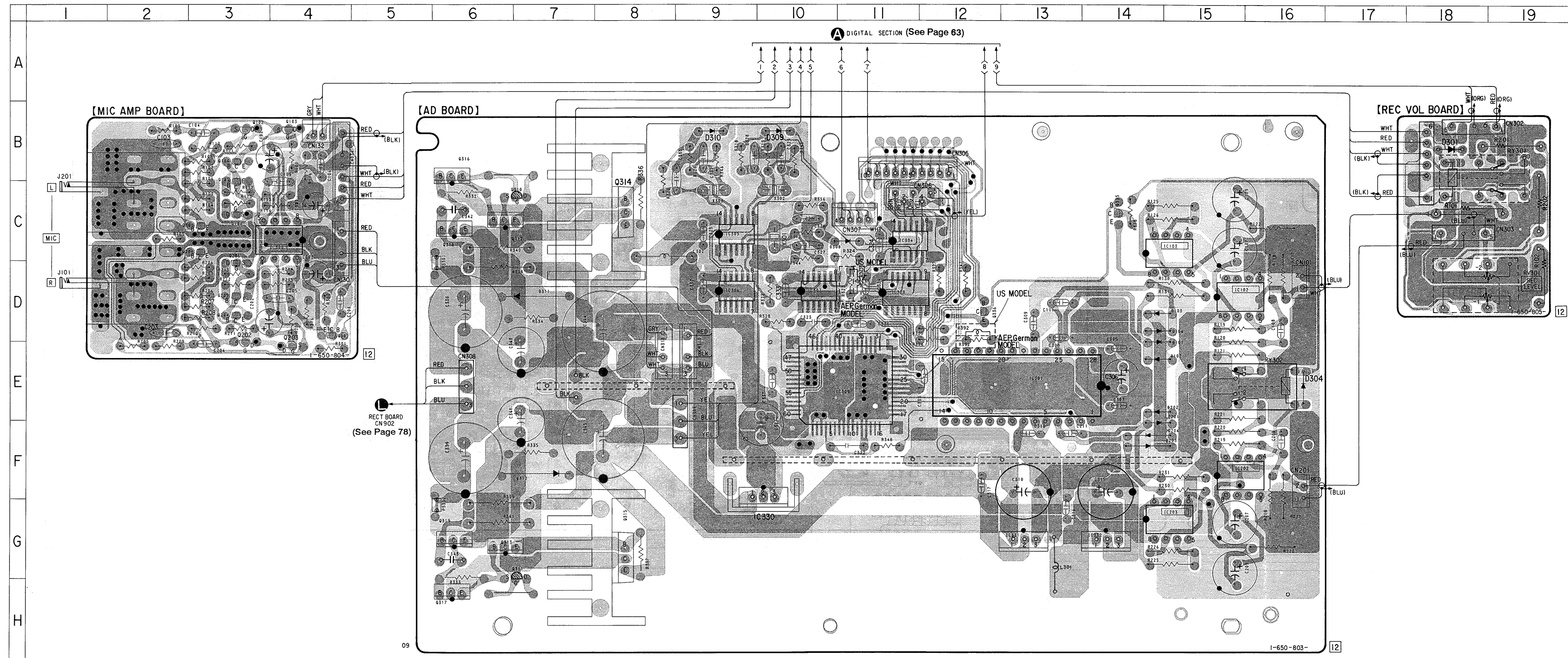


- Note:**
- All capacitors are in μF unless otherwise noted. pF or nF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4W or less unless otherwise specified.
 - % : indicates tolerance.
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
- : B+ Line
 - : B- Line
 - : B- Line
 - Voltage and waveforms are dc with respect to ground under no-signal conditions.
 - no mark : REC/PB
 - () : REC
 - < > : PB
 - Voltagess 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.
 - Circled numbers refer to waveforms.
 - Signal path.
 - >>> : REC
 - ∇ : MIC



4-11. PRINTED WIRING BOARD
— AUDIO SECTION —

- See page 20 for Circuit Boards Location.
- See page 28 for Semiconductor Lead Layouts.



• Semiconductor Location

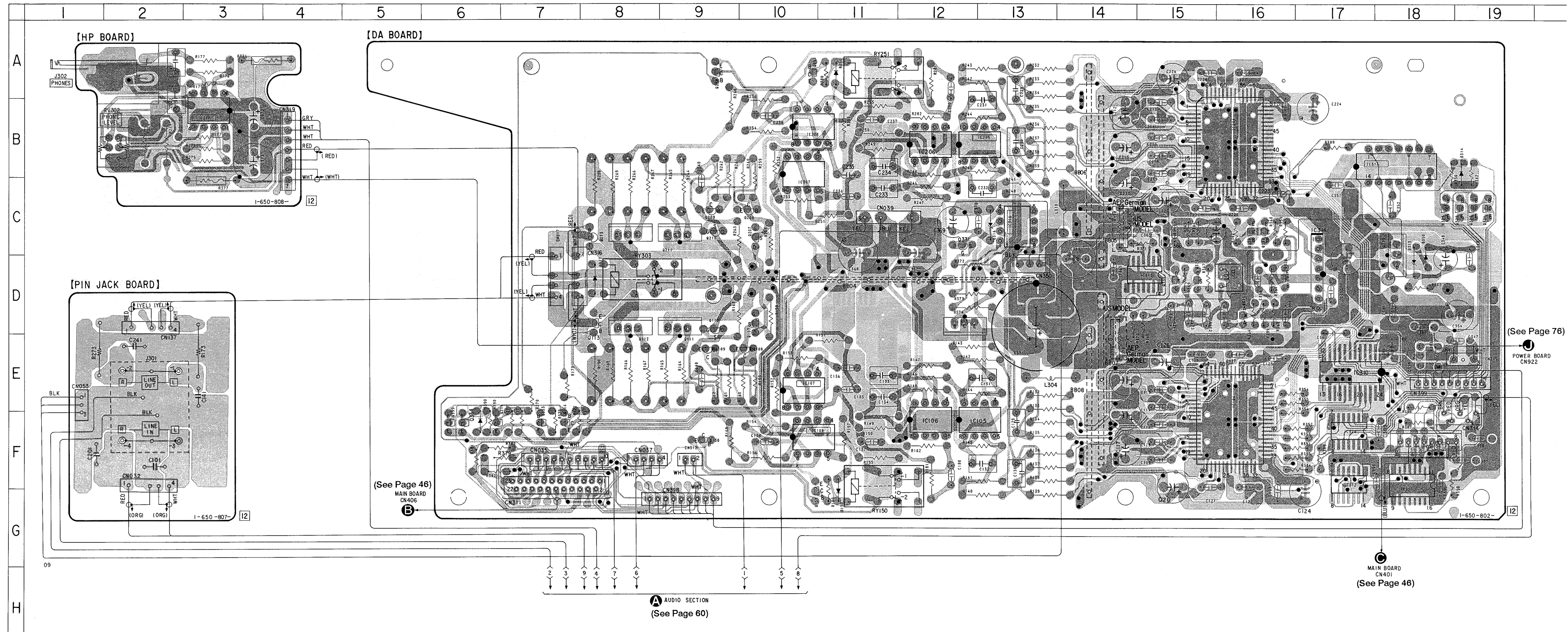
| Ref. No. | Location |
|----------|----------|
| D101 | E-15 |
| D102 | E-15 |
| D103 | D-15 |
| D104 | D-15 |
| D201 | E-15 |
| D202 | E-15 |
| D203 | F-15 |
| D204 | F-15 |
| D301 | B-18 |
| D304 | E-16 |
| D308 | C-11 |
| D309 | B-10 |
| D310 | B-9 |
| D311 | D-7 |
| D312 | F-7 |
| IC102 | D-16 |
| IC103 | C-15 |
| IC202 | F-16 |
| IC203 | G-15 |
| IC300 | C-4 |
| IC301 | E-13 |
| IC304 | C-11 |
| IC305 | C-9 |
| IC306 | D-9 |
| IC307 | D-10 |
| IC308 | D-11 |
| IC309 | E-11 |
| IC330 | G-10 |
| IC331 | G-13 |
| IC332 | G-14 |
| Q101 | C-3 |
| Q102 | B-3 |
| Q103 | B-4 |
| Q104 | B-3 |
| Q105 | B-3 |
| Q106 | C-3 |
| Q201 | C-2 |
| Q202 | D-3 |
| Q203 | E-4 |
| Q204 | D-3 |
| Q205 | D-3 |
| Q206 | D-3 |
| Q301 | D-4 |
| Q310 | C-7 |
| Q311 | G-7 |
| Q312 | C-7 |
| Q313 | G-6 |
| Q314 | B-8 |
| Q315 | G-8 |
| Q316 | B-6 |
| Q317 | H-6 |
| Q318 | C-6 |
| Q319 | G-6 |
| Q335 | C-14 |
| Q336 | D-12 |

- Note:
- : parts extracted from the component side.
 - : Through hole.
 - ▨ : Pattern on the side which enable seeing.
 - ▩ : Pattern of the rear side.

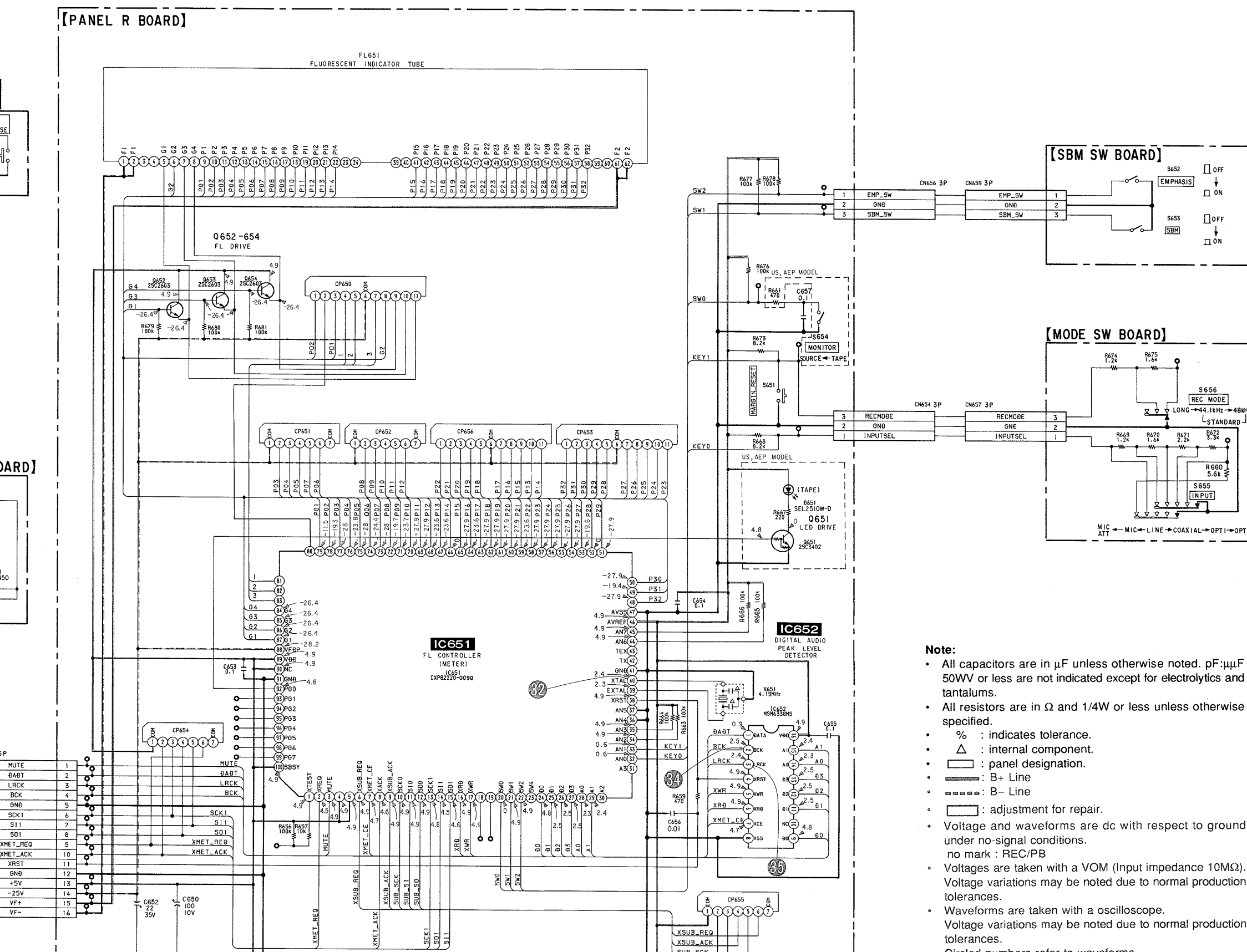
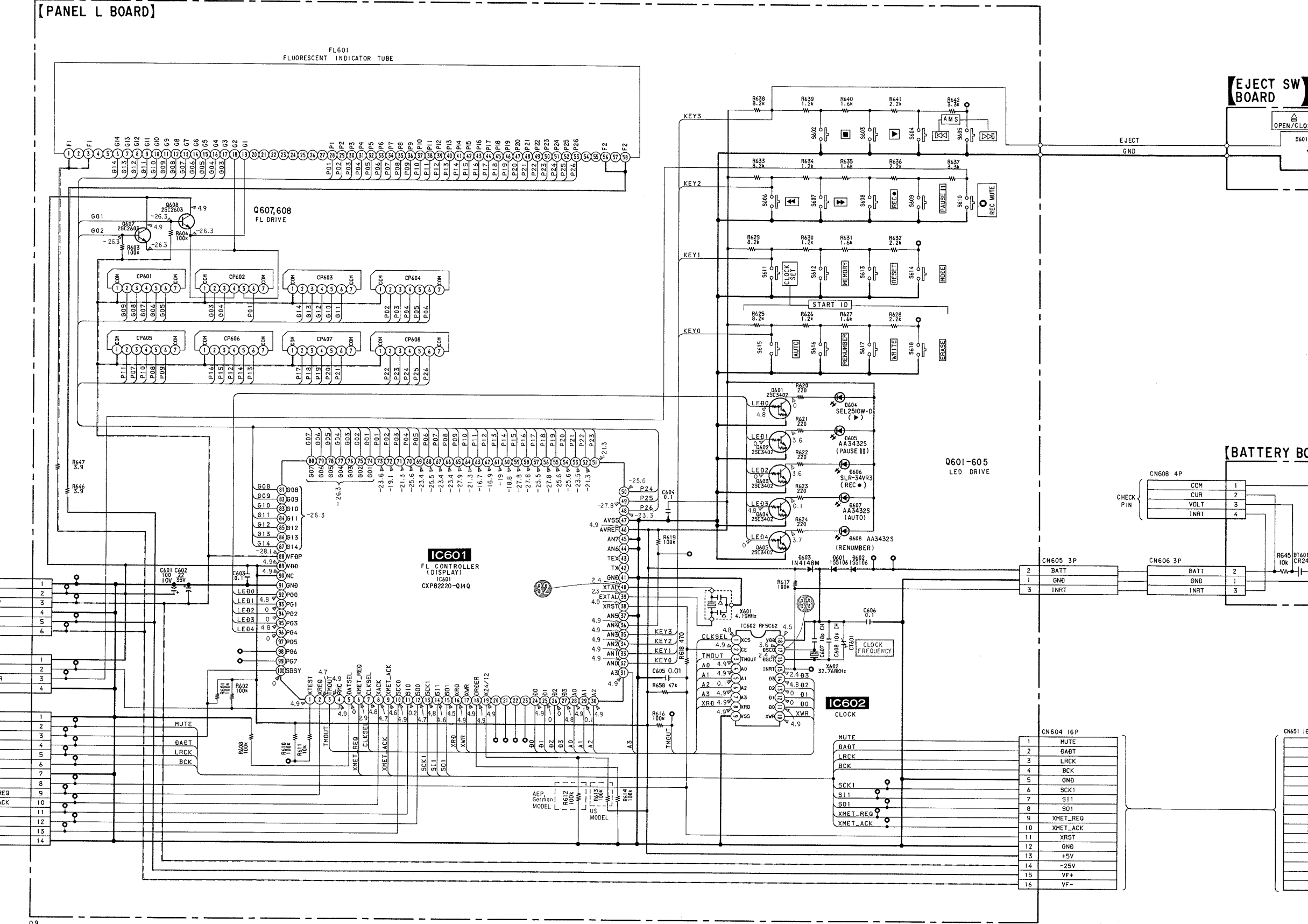
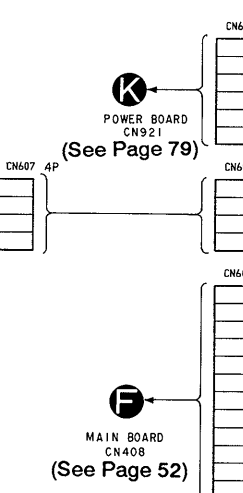
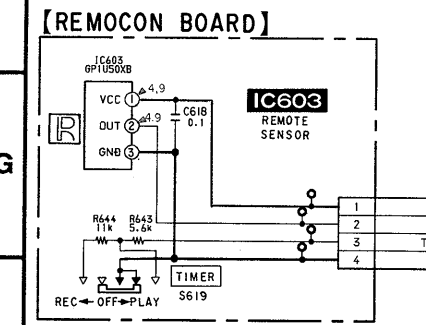
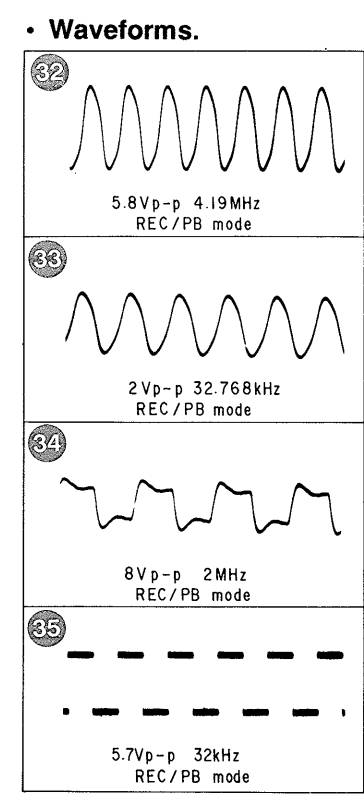
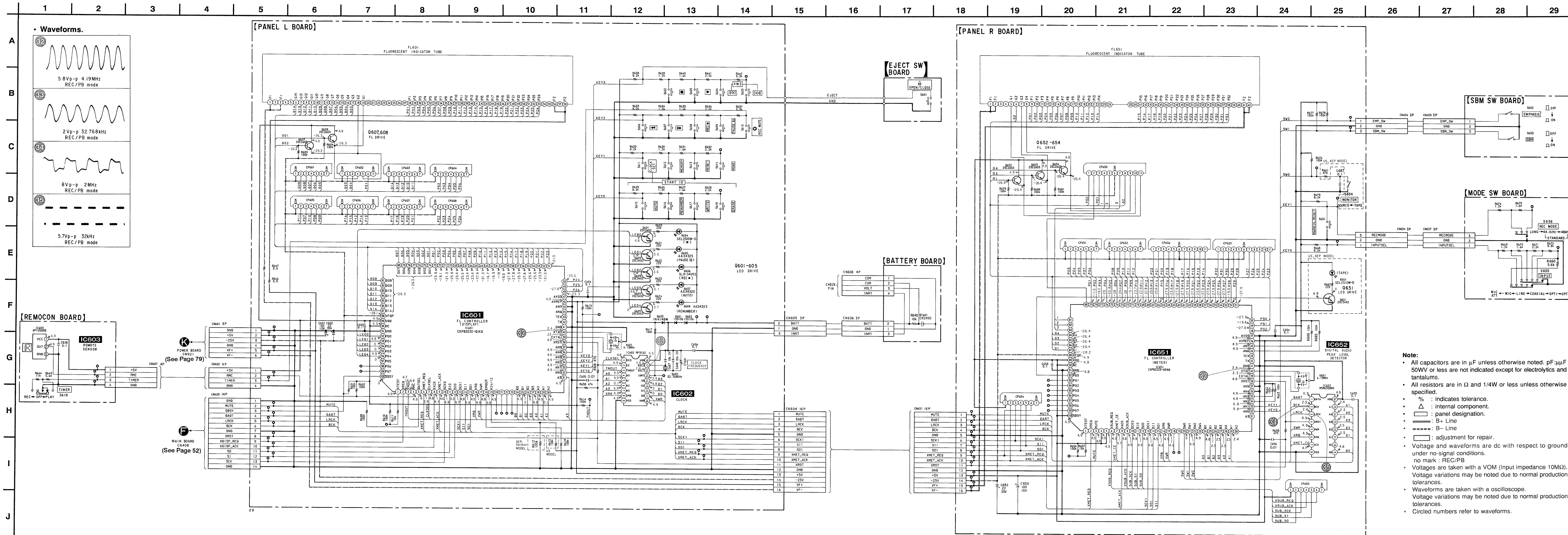
**4-12. PRINTED WIRING BOARD
— DIGITAL SECTION —**
 • See page 20 for Circuit Boards Location.
 • See page 28 for Semiconductor Lead Layouts.

• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D150 | G-11 |
| D250 | A-11 |
| D313 | C-18 |
| D314 | B-19 |
| D315 | D-16 |
| D316 | C-13 |
| D317 | E-8 |
| D350 | C-18 |
| D390 | F-6 |
| IC104 | E-16 |
| IC105 | F-12 |
| IC106 | F-12 |
| IC107 | E-10 |
| IC108 | F-10 |
| IC204 | B-16 |
| IC205 | B-13 |
| IC206 | B-12 |
| IC207 | C-10 |
| IC208 | B-10 |
| IC310 | E-17 |
| IC311 | B-18 |
| IC312 | F-17 |
| IC313 | G-18 |
| IC314 | C-17 |
| IC315 | D-15 |
| IC316 | C-13 |
| IC317 | B-3 |
| IC320 | F-17 |
| IC399 | E-18 |
| Q107 | D-10 |
| Q108 | E-10 |
| Q109 | E-9 |
| Q110 | D-9 |
| Q111 | E-9 |
| Q112 | E-8 |
| Q113 | E-8 |
| Q114 | F-7 |
| Q150 | F-9 |
| Q151 | G-10 |
| Q207 | C-10 |
| Q208 | C-10 |
| Q209 | C-9 |
| Q210 | C-9 |
| Q211 | C-9 |
| Q212 | C-8 |
| Q213 | C-8 |
| Q214 | F-6 |
| Q250 | A-9 |
| Q251 | A-10 |
| Q320 | C-19 |
| Q321 | C-19 |
| Q322 | C-19 |
| Q323 | C-18 |
| Q325 | C-18 |
| Q326 | D-16 |
| Q327 | C-16 |
| Q328 | C-16 |
| Q329 | D-15 |
| Q330 | D-15 |
| Q331 | C-12 |
| Q332 | D-12 |
| Q333 | F-7 |
| Q334 | F-6 |
| Q399 | F-6 |



4-14. SCHEMATIC DIAGRAM — PANEL SECTION — See page 92 for IC Pin Functions.



Note:
• All capacitors are in μF unless otherwise noted. pF:μF
50WV or less are not indicated except for electrolytics and tantalums.
• All resistors are in Ω and 1/4W or less unless otherwise specified.
• % : indicates tolerance.
• Δ : internal component.
• □ : panel designation.
• — : B+ Line
• — : B- Line
• — : adjustment for repair.
• Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark : REC/PB
• Voltages are taken with a VOM (Input impedance 10MΩ). 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.
• Circled numbers refer to waveforms.

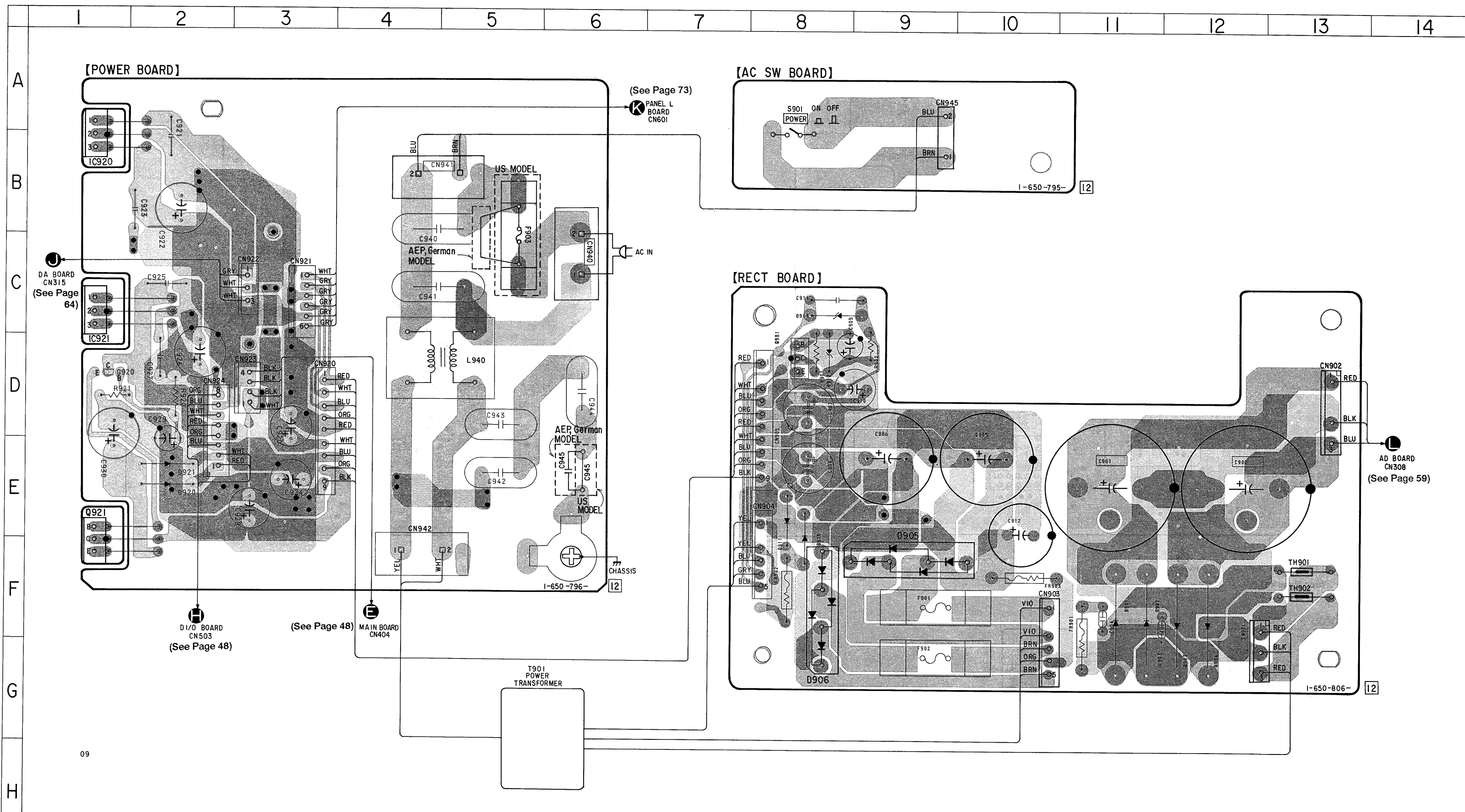
4-16. PRINTED WIRING BOARD

— POWER SECTION —

- See page 20 for Circuit Boards Location.
- See page 28 for Semiconductor Lead Layouts.

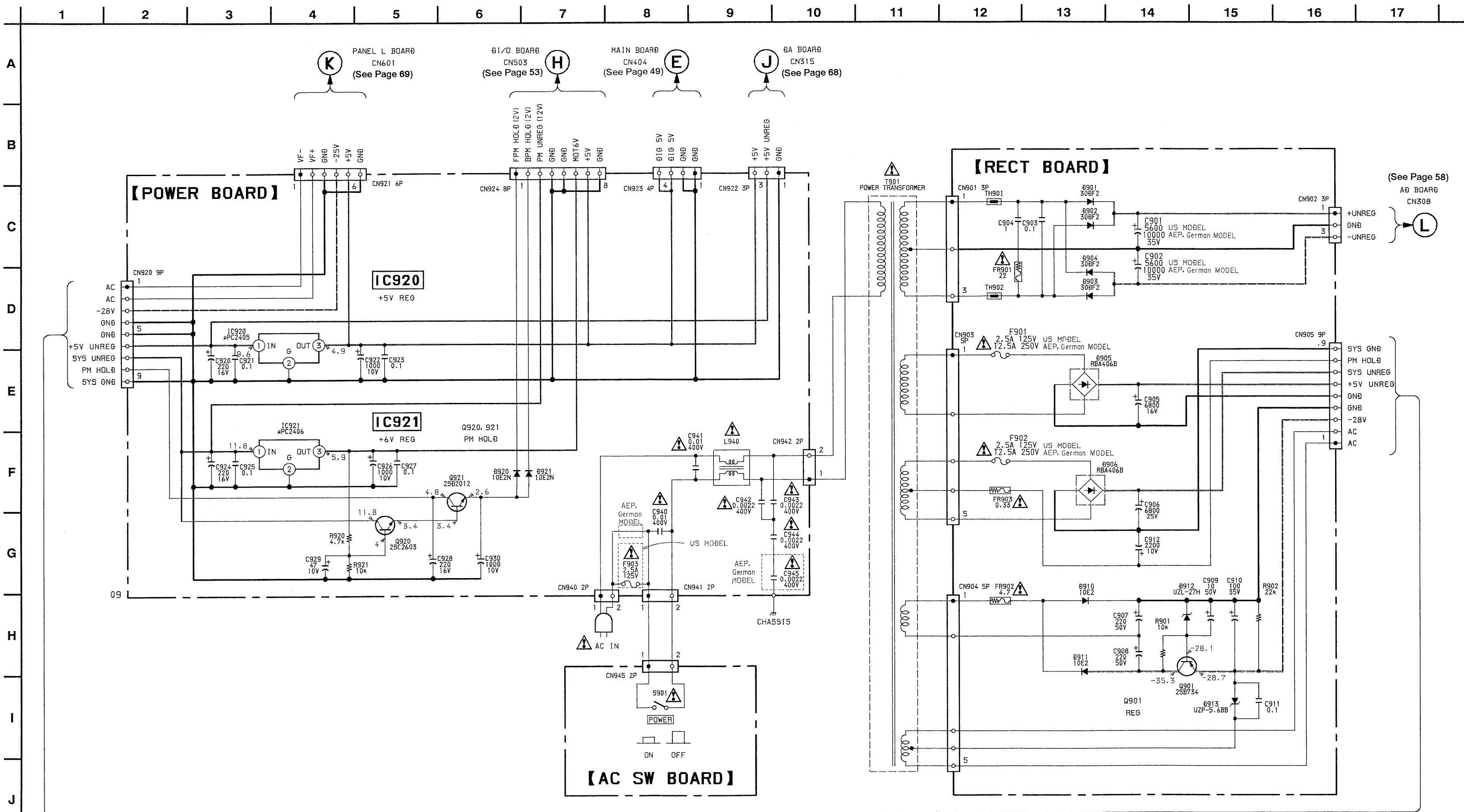
• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D901 | F-11 |
| D902 | F-11 |
| D903 | G-12 |
| D904 | G-12 |
| D905 | F-9 |
| D906 | G-8 |
| D910 | F-8 |
| D911 | F-8 |
| D912 | D-8 |
| D913 | C-8 |
| D920 | F-2 |
| D921 | F-2 |
| IC920 | B-1 |
| IC921 | D-1 |
| Q901 | D-8 |
| Q920 | D-1 |
| Q921 | F-1 |



Note:

- ○ : parts extracted from the component side.
- ● : Through hole.
- ■ : Pattern from the side which enable seeing.
- ▨ : Pattern of the rear side.



Note:

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$. 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- : fusible resistor.
- : panel designation.

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

- : B+ Line
- : B- Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark : REC/PB
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.

4-18. IC PIN FUNCTIONS

• IC104, 204 D/A CONVERTER (CXD2562Q)

| Pin | Signal Name | I/O | Function |
|-----|-------------|-----|---|
| 1 | Vss2 | – | Analog GND |
| 2 | L2 (+) | O | LCHPLM output 2 (positive phase) |
| 3 | Vss | – | Analog GND |
| 4 | L2 (–) | O | LCHPLM output 2 (antiphase) |
| 5 | VDD | – | Analog power supply (+B) |
| 6 | VDD2 | – | Analog power supply (+B) |
| 7 | VSUB(A)L | – | Substrate. Connected to GND. |
| 8 | XVDD | – | Master clock power supply (+B) |
| 9 | XOUT | O | Crystal oscillation output. Not used in this unit. |
| 10 | XIN | O | Crystal oscillation input |
| 11 | XVSS | – | Master clock GND |
| 12 | XVSS | – | Master clock GND |
| 13 | XSUB(A)R | – | Substrate. Connected to GND. |
| 14 | VDD2 | – | Analog power supply (+B) |
| 15 | VDD | – | Analog power supply (+B) |
| 16 | R2 (–) | O | RCHPLM output 2 (antiphase) |
| 17 | Vss | – | Analog GND |
| 18 | R2 (+) | O | RCHPLM output 2 (positive phase) |
| 19 | Vss2 | – | Analog GND |
| 20 | Vss2 | – | Analog GND |
| 21 | R1 (+) | O | RCHPLM output 1 (positive phase) |
| 22 | Vss | – | Analog GND |
| 23 | R1 (–) | O | RCHPLM output 1 (antiphase) |
| 24 | VDD | – | Analog power supply (+B) |
| 25 | VDD2 | – | Analog power supply (+B) |
| 26 | VSUB (C) R | – | Substrate. Connected to GND. |
| 27 | VSUB (D) R | – | Substrate. Connected to GND. |
| 28 | DVDD R | – | Digital power supply (+B) |
| 29 | X18/20 | I | Input word length setting. “H”: 20-bit, “L”: 18-bit. Fixed to “H” in this unit. |
| 30 | SPLN | I | “L”: 2CH/CHIP, “H”: 1CH/CHIP mode. Fixed to “H” in this unit. |
| 31 | TEST9 | I | Internal calculation mode. Normally “L”. |
| 32 | SYNC | I | Sync control. Fixed to “L” in this unit. |
| 33 | INIT | I | Resynchronized at the rising edge of this signal. |
| 34 | TEST8 | I | RCHPLM output mute. “H”: Mute. Connected to GND in this unit. |
| 35 | TEST7 | I | LCHPLM output mute. “H”: Mute. Connected to GND in this unit. |
| 36 | LRCKI | I | LRCK input |
| 37 | DR1 | I | RCH data input |
| 38 | DL1 | I | LCH data input |
| 39 | BCK1 | I | BCK input |
| 40 | 512Fs | O | 512 Fs clock output |

| Pin | Signal Name1 | I/O | Function |
|-----|--------------|-----|--|
| 41 | DVSS R | – | Digital GND |
| 42 | DVSS L | – | Digital GND |
| 43 | 128Fs | O | 128 Fs clock output. Not used in this unit. |
| 44 | DINIT | O | Delay INIT signal output. Not used in this unit. |
| 45 | INAF | O | Outputs “H” in case of incorrect sync between input/output. Not used in this unit. |
| 46 | LRCKO | O | LRCK output. Not used in this unit. |
| 47 | TEST5 | O | RCH noise shaping output data. Not used in this unit. |
| 48 | TEST6 | O | LCH noise shaping output data. Not used in this unit. |
| 49 | DM1 | I | Dither specification. Normally “L”. |
| 50 | DM2 | I | Dither specification. Normally “L”. |
| 51 | DPOL | I | Dither polarity. Normally “L”. |
| 52 | TEST4 | I | Test pin. Normally “L”. |
| 53 | TEST3 | I | Test pin. Normally “L”. |
| 54 | TEST2 | I | Test pin. Normally “L”. |
| 55 | TEST1 | I | Test pin. Normally “L”. |
| 56 | DVDD L | – | Digital power supply (+B) |
| 57 | VSUB(D)L | – | Substrate. Connected to GND. |
| 58 | VSUB(C)L | – | Substrate. Connected to GND. |
| 59 | VDD2 | – | Analog power supply (+B) |
| 60 | VDD | – | Analog power supply (+B) |
| 61 | L1 (–) | O | LCHPLM output 1 (antiphase) |
| 62 | Vss | – | Analog GND |
| 63 | L1 (+) | O | LCHPLM output 1 (positive phase) |
| 64 | Vss2 | – | Analog GND |

• IC401, 402 DSP (CXD2605Q)

| Pin | Signal Name | I/O | Function |
|-----|-----------------|-----|---|
| 1 | A8 | O | External RAM address output |
| 2 | A9 | O | External RAM address output |
| 3 | V _{DD} | — | +5V |
| 4 | A10 | O | External RAM address output |
| 5 | A11 | O | External RAM address output |
| 6 | A12 | O | External RAM address output |
| 7 | A13 | O | External RAM address output |
| 8 | A14 | O | External RAM address output |
| 9 | XWE | O | External RAM write enable signal output |
| 10 | XOE | O | External RAM output enable signal output |
| 11 | XEAN | O | External addressing enable signal output |
| 12 | TST1 | I | Test input. Fixed to “L”. |
| 13 | XT1O | O | Crystal oscillation circuit 1 output |
| 14 | XT1I | I | Crystal oscillation circuit 1 input |
| 15 | V _{SS} | — | GND |
| 16 | XRST | I | Reset input. “L”: Reset. |
| 17 | CLKO | O | System clock output (frequency; SELC=“L”: 4.9152 MHz, SELC=“H”: 8.192 MHz) |
| 18 | MINT | O | Control byte (1) bit 1=“L”: Q code decode (detecting between songs) output, “H”: BCK clock output by RX-PLL. |
| 19 | ATSY | I | ATF sync signal input |
| 20 | MCLK | O | Channel clock (fch) output |
| 21 | DREF | O | SBSY period, duty 50 signal output |
| 22 | SBPM | O | Control byte (1) bit 1=“L”: Outputs monitor signal for data transfer to microprocessor (transfer enable), “H”: F256 clock output by RX-PLL. |
| 23 | EXCK | I | Data transfer clock input for microprocessor |
| 24 | SDSI | I | Serial data input from microprocessor |
| 25 | SDSO | O | Serial data output to microprocessor |
| 26 | SBSY | O | Frame sync signal output for transferring data with microprocessor |
| 27 | RFPL | O | Outputs 1/5880 frequency-divided PLL clock. |
| 28 | CCLK | O | SELC=“L”: Outputs 9.8304 MHz, “H”: Outputs 12.288 MHz. |
| 29 | MUTE | I | Mute input. “H”: Mute. Not mute REC monitor sound. |
| 30 | MUTM | O | Mute monitor. “H”: Indicates muting occurs. |
| 31 | UNLK | O | RXPLL lock monitor signal output. “L”: Indicates locking occurs. |
| 32 | RFCT | I | Playback RF signal control (“L”: Valid, “H”: Invalid) |
| 33 | SYMN | O | Outputs monitor signal for C1 check results corresponding to RF. |
| 34 | SELB | I | Test pin. Fixed to “H”. |
| 35 | PLCK | O | Control byte (1) bit 1=“L”: RFPLL clock output, “H”: F128 clock output by RX-PLL. |
| 36 | TST2 | I | Test pin. Fixed to “L”. |
| 37 | RFDT | I | Playback RF signal input |
| 38 | XCS | I | Chip select input for data transfer with microprocessor. “L”: Transfer enable. |
| 39 | SWP | I | RF switching pulse. “L”: A track, “H”: B track. |
| 40 | V _{SS} | — | GND |

| Pin | Signal Name | I/O | Function |
|-----|-----------------|-----|--|
| 41 | PIPC | O | ATF pilot signal/discrimination signal output for record signal. "H": Pilot signal. |
| 42 | REPB | O | REC/PB discrimination signal output. "H": REC. |
| 43 | REDT | O | Record signal output |
| 44 | TST4 | I | Test pin. Fixed to "L". |
| 45 | PDO | O | RXPLL phase comparator output |
| 46 | SELC | I | Oscillation frequency select signal input |
| 47 | MUTA | I | Mute input. "H": Mute. Also mutes REC monitor sound. |
| 48 | PLCO | I | RXPLL external VCO clock input (512 fs as reference) |
| 49 | PLVR | O | RXPLL phase comparison signal output (2 fs created from PLL clock.) |
| 50 | PLRF | O | RXPLL phase comparison signal output (RX SYNC detection signal, 2 fs) |
| 51 | MSSL | I | Master mode/slave mode select. "H": Master. |
| 52 | RX | I | Digital interface signal input |
| 53 | V _{DD} | – | +5V |
| 54 | TX | O | Digital interface signal input |
| 55 | SELA | I | Test pin. Fixed to "H". |
| 56 | EXSY | I/O | External sync signal input/output |
| 57 | EXSN | I/O | External sync signal input/output |
| 58 | F128 | I/O | 128 fs/256 fs (at 2 × speed) signal input/output |
| 59 | F256 | O | 256 fs/512 fs (at 2 × speed) signal output |
| 60 | F512 | O | 512 fs signal output |
| 61 | ADLF | I | ADTT, ADDI, ADDN serial data LSB/MSB first select input. "H": LSB first. |
| 62 | DALF | I | DADT, DADO serial data LSB/MSB first select input. "H": LSB first. |
| 63 | XT2O | O | Crystal oscillation circuit 2 output |
| 64 | XT2I | I | Crystal oscillation circuit 2 input |
| 65 | V _{SS} | – | GND |
| 66 | XT3O | O | Crystal oscillation circuit 3 output |
| 67 | XT3I | I | Crystal oscillation circuit 3 input |
| 68 | FSEN | I | F128, BCK, LRCK input/output select input. "H": Output. |
| 69 | LR03 | O | Inverted signal of LR02 |
| 70 | LR02 | O | Control byte (1) bit 1="L": LRCK 16BCK delay signal, "H": LRCK clock output by RX-PLL. |
| 71 | LR01 | O | LRCK 15BCK delay signal |
| 72 | LRCK | I/O | fs/2 fs (at 2 × speed) signal input/output |
| 73 | WCK | O | 2 fs/4 fs (at 2 × speed) signal output |
| 74 | XBCK | O | Outputs inverted signal of BCK |
| 75 | BCK | I/O | 64 fs/128 fs (at 2 × speed) signal input/output |
| 76 | ADDT | I | A/D serial data input |
| 77 | DADT | O | D/A serial data output |
| 78 | DADO | I | Audio data input for digital OUT |
| 79 | ADDI | O | Digital IN audio data output |
| 80 | ADDN | I | Digital IN audio data input |

| Pin | Signal Name | I/O | Function |
|-----|-----------------|-----|---|
| 81 | ERRI | I | Validity flag data input for digital OUT |
| 82 | ERRF | O | DADT data compensation data/discrimination signal output. "H": Compensation data. |
| 83 | MNTG | O | "H": Indicates monitor data for error correction is being output to D7 to D0. |
| 84 | D7 | I/O | External RAM data input/output (MSB) |
| 85 | D6 | I/O | External RAM data input/output |
| 86 | D5 | I/O | External RAM data input/output |
| 87 | D4 | I/O | External RAM data input/output |
| 88 | D3 | I/O | External RAM data input/output |
| 89 | D2 | I/O | External RAM data input/output |
| 90 | V _{ss} | – | GND |
| 91 | D1 | I/O | External RAM data input/output |
| 92 | D0 | I/O | External RAM data input/output (LSB) |
| 93 | A0 | O | External RAM address output |
| 94 | A1 | O | External RAM address output |
| 95 | A2 | O | External RAM address output |
| 96 | A3 | O | External RAM address output |
| 97 | A4 | O | External RAM address output |
| 98 | A5 | O | External RAM address output |
| 99 | A6 | O | External RAM address output |
| 100 | A7 | O | External RAM address output |

• IC403 MAIN MICROPROCESSOR (CXP87532-007Q)

| Pin | Signal Name | I/O | Function |
|-----|-------------|-----|--|
| 1 | SBM | O | SBM ON/OFF control output. "H": ON, "L": OFF. |
| 2 | LCF | O | Low cut filter ON/OFF control output. "H": Fixed to LCF ON. |
| 3 | OBIT | O | A/D output word length 24-bit/16-bit select. "L": Fixed to 16-bit. |
| 4 | MIC/X LINE | O | MIC/LINE input select. "H": MIC, "L": LINE. |
| 5 | ATT ON | O | Microphone attenuator ON/OFF control output. "H": ON, "L": OFF. |
| 6 | | — | Not used. |
| 7 | ADA SO | O | Serial data output to digital filter |
| 8 | ADA SCK | O | Serial clock output to digital filter |
| 9 | F VCO EN | O | Digital IN VCO oscillation control. "H": Oscillation; "L": Stop. |
| 10 | LD4 RSV | O | Serial communication data latch pulse to DSP. |
| 11 | LD3 AD | O | Serial communication data latch pulse to A/D digital filter |
| 12 | LD2 DA | ∅ | Serial communication data latch pulse to D/A digital filter |
| 13 | LD1 DSP | O | Selects command/data on communication line with DSP. |
| 14 | LD0 GARY | O | Serial communication data latch pulse to gate array. |
| 15 | | O | } Not used (open). |
| 16 | | O | |
| 17 | | O | |
| 18 | | O | |
| 19 | | I | |
| 20 | FS48 | O | 24.576 MHz crystal select output. ("L": Active) Fs=48 kHz. |
| 21 | FS44 | O | 22.5792 MHz crystal select output. ("L": Active) Fs=44.1 kHz. |
| 22 | FS32 | O | 16.384 MHz crystal select output. ("L": Active) Fs=32 kHz. |
| 23 | MODE0 | I | } Not used. Fixed to "L". |
| 24 | MODE1 | I | |
| 25 | | I | |
| 26 | | I | |
| 27 | | O | } Not used (open). |
| 28 | | O | |
| 29 | | O | |
| 30 | | O | |
| 31 | XLMUTE | O | Line mute output. "L": Mute. |
| 32 | A PDN | O | A/D converter control output. "H": Power down, "L": Active. |
| 33 | MUTE 2605#2 | O | Mute signal to CXD2605Q (IC402: slave). "H": Mute. |
| 34 | MUTE 2605#1 | O | Mute signal to CXD2605Q (IC401: master). "H": Mute. |
| 35 | AF3 | I | } AF mode select. Fixed to "H". |
| 36 | AF2 | I | |
| 37 | AF1 | I | |
| 38 | AF0 | I | |
| 39 | MP | — | Connected to GND. |
| 40 | XRST | I | System reset input. "L": Reset. |

| Pin | Signal Name | I/O | Function |
|-----|-------------------|-----|--|
| 41 | V _{ss} | — | GND |
| 42 | XTAL | O | System clock output (open) |
| 43 | EXTAL | I | System clock input |
| 44 | XDISP-RQ | O | Communication request output to counter microprocessor (“L”: Active) |
| 45 | REC DI | O | Record current control output. “H”: Record disable, “L”: Record enable. |
| 46 | X MECH REQ | O | Communication request output to mechanism microprocessor (“L”: Active) |
| 47 | | O | Not used (open). |
| 48 | X DISP ACK | I | Communication response input from counter microprocessor (“L”: Active) |
| 49 | DM DT I | I | Serial data input from counter microprocessor and mechanism microprocessor |
| 50 | DM DT O | O | Serial data output to counter microprocessor and mechanism microprocessor |
| 51 | DM CK | O | Serial clock output to counter microprocessor and mechanism microprocessor |
| 52 | XSBSY | I | SUB SYNC input from CXD2605 (IC401: master) |
| 53 | SR DT IN | I | Serial data input from CXD2605 (IC401: master, IC402: slave) |
| 54 | SR DT OUT | O | Serial data output to CXD2605 (IC401: master, IC402: slave) |
| 55 | X SR CK | O | Serial clock output to CXD2605 (IC401: master, IC402: slave) |
| 56 | AV _{ss} | — | A/D port GND. Connected to GND. |
| 57 | AV _{REF} | — | A/D port reference voltage input. Connected to +5V. |
| 58 | AV _{DD} | — | A/D port power supply. Connected to +5V. |
| 59 | X MECH BUSY | I | Communication control signal from mechanism microprocessor. “H”: Communication enable, “L”: Communication disable. |
| 60 | | I | Not used. Fixed to “L”. |
| 61 | | I | Not used. Fixed to “H”. |
| 62 | | I | Not used. Connected to GND. |
| 63 | | I | Not used. Fixed to “L”. |
| 64 | MUT MON | I | Mute monitor input. “H”: Mute. |
| 65 | M INT | I | Q code decode value input. “H”: Between songs. |
| 66 | | I | } Not used. Connected to GND. |
| 67 | | I | |
| 68 | | I | |
| 69 | | I | |
| 70 | | I | |
| 71 | | I | |
| 72 | | I | |
| 73 | | I | |
| 74 | | I | Not used. Fixed to “L”. |
| 75 | | O | } Not used (open). |
| 76 | | O | |
| 77 | | O | |
| 78 | | O | |
| 79 | | O | |
| 80 | | O | |

| Pin | Signal Name | I/O | Function |
|-----|-----------------|-----|---|
| 81 | | O | } Not used (open). |
| 82 | | O | |
| 83 | | O | |
| 84 | | O | |
| 85 | X DSP RDY | I | Communication control signal from DSP. "L": Data transfer enable, "H": Data transfer disable. |
| 86 | XTEST | I | Test pin. "L": Test mode. (Commonly used for D PG, PATH, torque.) |
| 87 | PW DN | I | Not used. Fixed to "L". |
| 88 | V _{SS} | – | GND |
| 89 | V _{DD} | – | +5V power supply |
| 90 | V _{PP} | – | Connected to +5V. |
| 91 | | O | } Not used (open). |
| 92 | | O | |
| 93 | XAD INIT | O | A/D digital filter reset output. "L": Reset. |
| 94 | XDA INIT | O | D/A digital filter reset output. "L": Reset. |
| 95 | EMP | O | Emphasis ON/OFF select output. "H": Emphasis ON. |
| 96 | | O | } Not used (open). |
| 97 | HISPD | O | |
| 98 | SEL05 XSL | O | Chip select output to CXD2605Q. "L": IC402, "H": IC401. |
| 99 | | O | } Not used (open). |
| 100 | | O | |

• IC405 DSP (CXD2704Q)

| Pin | Signal Name | I/O | Function |
|----------|--------------|-----|--|
| 1 | TST1 | I | Test pin. Fixed to "L". |
| 2 | Vss | — | GND |
| 3 | TEST | I | } Test pin. Fixed to "L". |
| 4 | PSSL | I | |
| 5 | HA0 | I | |
| 6 | HA1 | I | |
| 7 | HA2 | I | |
| 8 | HA3 | I | |
| 9 | XRD | I | |
| 10 | MCK1 | I | Master clock input 1 |
| 11 | MCK2 | I | Master clock input 2. "H": Not used. |
| 12 | Vss | — | GND |
| 13 | H16B | I | Test pin. Fixed to "L". |
| 14 to 22 | HD0 to HD8 | O | Test pin. Not used. |
| 23 | Vss | — | GND |
| 24 to 26 | HD9 to HD11 | O | Test pin. Not used. |
| 27 | SIA | I | 2-channel serial data input A |
| 28 | SOA | O | 2-channel serial data output A |
| 29 | XBCK | I | Serial data transfer clock |
| 30 | LR03 | I | Sampling rate clock input for serial I/O |
| 31 | OVR | O | Not used. |
| 32 | Vss | — | GND |
| 33 | VDD | — | Power supply |
| 34 | XCLR | I | Reset input. "L": Reset. |
| 35 | SIB | I | 2-channel serial data input B |
| 36 | SOB | O | 2-channel serial data output B |
| 37 to 40 | HD12 to HD15 | O | Test pin. Not used. |
| 41 | — | — | Open |
| 42 | Vss | — | GND |
| 43, 44 | — | — | Open |
| 45 to 51 | A0 to A6 | O | Optional DRAM address output |
| 52 | Vss | — | GND |
| 53 to 56 | A7 to A10 | O | Optional DRAM address output |
| 57 | TSTJ | — | } Test pin. Fixed to "L". |
| 58 | SBCK | — | |
| 59 | SLC | — | |

| Pin | Signal Name | I/O | Function |
|----------|-----------------|-----|---|
| 60 to 62 | — | — | Not used (open). |
| 63 | V _{ss} | — | GND |
| 64 to 67 | — | — | Not used (open). |
| 68 | XRAS | O | Row address strobe output to optional DRAM |
| 69 | XWSO | O | Optional DRAM read/write output. “L”: Write. |
| 70 | DIO | I/O | Data input/output with optional DRAM |
| 71 | XCAS | O | Column address strobe output to optional DRAM |
| 72 | V _{ss} | — | GND |
| 73 | V _{DD} | — | Power supply |
| 74 | SDTI | I | Microprocessor interface serial data input |
| 75 | SCK | I | Microprocessor interface serial transfer clock |
| 76 | XSLD | I | Microprocessor interface serial data input latch |
| 77 | XRDY | O | Microprocessor interface transfer ready (“H”: Transfer disable) |
| 78 | SDTO | O | Not used. |
| 79 | XCS | I | Microprocessor interface chip select. Fixed to “L”. |
| 80 | — | — | Not used (open). |

• IC601 FL CONTROLLER (DISPLAY) (CXP82220-014Q)

| Pin | Signal Name | I/O | Function | | | | | | | | | | | | | | |
|---------------|-------------|----------|--|--------|----------|----------|-------|-------|----------|---------------|---------------|-----|-----|-----|-----|-----|-----|
| 1 | XTEST | I | Test pin. "L": Test mode. | | | | | | | | | | | | | | |
| 2 | XREQ | I | Communication request input from main microprocessor ("L": Active) | | | | | | | | | | | | | | |
| 3 | TMOUT | I | TMOUT signal input from clock IC (RF5C62) | | | | | | | | | | | | | | |
| 4 | RMC | I | Remote control signal input | | | | | | | | | | | | | | |
| 5 | DATSEL | I | Remote control category (DAT1/DAT2) select input. "L": Fixed to DAT1. | | | | | | | | | | | | | | |
| 6 | XMET REQ | O | Communication request output to meter microprocessor ("L": Active) | | | | | | | | | | | | | | |
| 7 | CLKSEL | O | Chip select output to clock IC (RF5C62). "L": Active. | | | | | | | | | | | | | | |
| 8 | XACK | O | Communication response output to main microprocessor ("L": Active) | | | | | | | | | | | | | | |
| 9 | XMET ACK | I | Communication response input from meter microprocessor ("L": Active) | | | | | | | | | | | | | | |
| 10 | SCK0 | I | Serial clock input from main microprocessor | | | | | | | | | | | | | | |
| 11 | SI0 | I | Serial data input from main microprocessor | | | | | | | | | | | | | | |
| 12 | S00 | O | Serial data output to main microprocessor | | | | | | | | | | | | | | |
| 13 | SCK1 | O | Serial clock output to meter microprocessor | | | | | | | | | | | | | | |
| 14 | SI1 | I | Serial data input from meter microprocessor | | | | | | | | | | | | | | |
| 15 | SO1 | O | Serial data output to meter microprocessor | | | | | | | | | | | | | | |
| 16 | XRD | O | Read request output to clock IC (RF5C62). "L": Active. | | | | | | | | | | | | | | |
| 17 | XWR | O | Write request output to clock IC (RF5C62). "L": Active. | | | | | | | | | | | | | | |
| 18 | ORDER | I | Clock display select input. "H": years, months, days, "L": days, months, years. Fixed to "H". | | | | | | | | | | | | | | |
| 19 | X24/12 | I | Clock display select input. "H": 12 hours (AM/PM), "L": 24 hours. Fixed to "H". | | | | | | | | | | | | | | |
| 20 | | O | Not used (open). | | | | | | | | | | | | | | |
| 21 | | O | Not used (open). | | | | | | | | | | | | | | |
| 22 | | O | Not used (open). | | | | | | | | | | | | | | |
| 23 | | O | Not used (open). | | | | | | | | | | | | | | |
| 24 | D0 | I/O | } Clock IC (RF5C62) 4-bit data bus | | | | | | | | | | | | | | |
| 25 | D1 | I/O | | | | | | | | | | | | | | | |
| 26 | D2 | I/O | | | | | | | | | | | | | | | |
| 27 | D3 | I/O | | | | | | | | | | | | | | | |
| 28 | A0 | O | } Clock IC (RF5C62) 4-bit address bus | | | | | | | | | | | | | | |
| 29 | A1 | O | | | | | | | | | | | | | | | |
| 30 | A2 | O | | | | | | | | | | | | | | | |
| 31 | A3 | O | | | | | | | | | | | | | | | |
| 32 | AN0 | I | Key switch input 0 (A/D port) <table border="1" style="margin-left: 20px;"> <tr> <td>Switch</td> <td>AUTO</td> <td>RENUMBER</td> <td>WRITE</td> <td>ERASE</td> <td>No input</td> </tr> <tr> <td>Voltage (Vdc)</td> <td>0.0</td> <td>0.6</td> <td>1.3</td> <td>1.9</td> <td>5.0</td> </tr> </table> | Switch | AUTO | RENUMBER | WRITE | ERASE | No input | Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 5.0 | | |
| Switch | AUTO | RENUMBER | WRITE | ERASE | No input | | | | | | | | | | | | |
| Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 5.0 | | | | | | | | | | | | |
| 33 | AN1 | I | Key switch input 1 (A/D port) <table border="1" style="margin-left: 20px;"> <tr> <td>Switch</td> <td>CLKSET</td> <td>MEMORY</td> <td>RESET</td> <td>MODE</td> <td>No input</td> </tr> <tr> <td>Voltage (Vdc)</td> <td>0.0</td> <td>0.6</td> <td>1.3</td> <td>1.9</td> <td>5.0</td> </tr> </table> | Switch | CLKSET | MEMORY | RESET | MODE | No input | Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 5.0 | | |
| Switch | CLKSET | MEMORY | RESET | MODE | No input | | | | | | | | | | | | |
| Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 5.0 | | | | | | | | | | | | |
| 34 | AN2 | I | Key switch input 2 (A/D port) <table border="1" style="margin-left: 20px;"> <tr> <td>Switch</td> <td>REW</td> <td>FF</td> <td>REC</td> <td>PAUSE</td> <td>MUTE</td> <td>No input</td> </tr> <tr> <td>Voltage (Vdc)</td> <td>0.0</td> <td>0.6</td> <td>1.3</td> <td>1.9</td> <td>2.5</td> <td>5.0</td> </tr> </table> | Switch | REW | FF | REC | PAUSE | MUTE | No input | Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 2.5 | 5.0 |
| Switch | REW | FF | REC | PAUSE | MUTE | No input | | | | | | | | | | | |
| Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 2.5 | 5.0 | | | | | | | | | | | |
| 35 | AN3 | I | Key switch input 3 (A/D port) <table border="1" style="margin-left: 20px;"> <tr> <td>Switch</td> <td>EJECT</td> <td>STOP</td> <td>PLAY</td> <td>AMS>></td> <td><<AMS</td> <td>No input</td> </tr> <tr> <td>Voltage (Vdc)</td> <td>0.0</td> <td>0.6</td> <td>1.3</td> <td>1.9</td> <td>2.5</td> <td>5.0</td> </tr> </table> | Switch | EJECT | STOP | PLAY | AMS>> | <<AMS | No input | Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 2.5 | 5.0 |
| Switch | EJECT | STOP | PLAY | AMS>> | <<AMS | No input | | | | | | | | | | | |
| Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 2.5 | 5.0 | | | | | | | | | | | |

| Pin | Signal Name | I/O | Function |
|----------|-------------|-----|---|
| 36 | AN4 | I | Not used. Fixed to "H". |
| 37 | AN5 | I | Not used. Connected to GND. |
| 38 | XRST | I | System reset input. "L": Reset. |
| 39 | EXTAL | I | Clock oscillation input (4.19 MHz) |
| 40 | XTAL | O | Clock oscillation output (4.19 MHz) |
| 41 | GND | — | GND |
| 42 | TX | O | } Not used (open). |
| 43 | TEX | I | |
| 44 | AN6 | I | } Not used. Connected to GND. |
| 45 | AN7 | I | |
| 46 | AVREF | — | A/D port reference voltage. Connected to +5V. |
| 47 | AVss | — | A/D port GND. Connected to GND. |
| 48 to 73 | P01 to P26 | O | FL display segment drive output |
| 74 to 87 | G01 to G14 | O | FL display grid drive output |
| 88 | VFDP | | -25V power supply for driving FL display |
| 89 | VDD | — | +5V |
| 90 | — | — | Connected to +5V. Fixed to "H". |
| 91 | GND | — | GND |
| 92 | PG0 | O | "PLAY" LED light output. "H": light. |
| 93 | PG1 | O | "PAUSE" LED light output. "H": light. |
| 94 | PG2 | O | "REC" LED light output. "H": light. |
| 95 | PG3 | O | "AUTO" LED light output. "H": light. |
| 96 | PG4 | O | "RENUMBER" LED light output. "H": light. |
| 97 | PG5 | O | } Not used (open). |
| 98 | PG6 | O | |
| 99 | PG7 | O | |
| 100 | SBSY | I | CXD2605Q (IC401: master) SBSY signal input |

• IC651 METER MICROPROCESSOR (CXP82220-009Q)

| Pin | Signal Name | I/O | Function | | | | | | | | | | | | | | |
|---------------|--------------|------|--|--------|--------------|--------|---------|-------|---------------|--------|---------------|-----|-----|-----|-----|-----|-----|
| 1 | X TEST | I | Test pin. "L": Test mode. | | | | | | | | | | | | | | |
| 2 | X REQ | I | Communication request input from counter microprocessor ("L": Active) | | | | | | | | | | | | | | |
| 3 | MUTE | I | Level meter mute signal input. "L": Mute. | | | | | | | | | | | | | | |
| 4 | | I | } Not used. Fixed to "H". | | | | | | | | | | | | | | |
| 5 | | I | | | | | | | | | | | | | | | |
| 6 | X SUB REQ | O | Not used. | | | | | | | | | | | | | | |
| 7 | X MET SEL | O | Chip select output to meter IC (MSM6338). "L": Active. | | | | | | | | | | | | | | |
| 8 | X ACK | O | Communication response output to counter microprocessor ("L": Active) | | | | | | | | | | | | | | |
| 9 | X MET ACK | O | } Not used. | | | | | | | | | | | | | | |
| 10 | SCK0 | I | | | | | | | | | | | | | | | |
| 11 | SIO | I | | | | | | | | | | | | | | | |
| 12 | SOO | O | | | | | | | | | | | | | | | |
| 13 | SCK1 | I | Serial clock input from counter microprocessor | | | | | | | | | | | | | | |
| 14 | SI1 | I | Serial data input from counter microprocessor | | | | | | | | | | | | | | |
| 15 | S01 | O | Serial data output to counter microprocessor | | | | | | | | | | | | | | |
| 16 | X RD | O | Read request output to meter IC (MSM6338). "L": Active. | | | | | | | | | | | | | | |
| 17 | X WR | O | Write request output to meter IC (MSM6338). "L": Active. | | | | | | | | | | | | | | |
| 18 | | O | } Not used. | | | | | | | | | | | | | | |
| 19 | | O | | | | | | | | | | | | | | | |
| 20 | SW0 | I | TAPE switch input | | | | | | | | | | | | | | |
| 21 | SW1 | I | SRM switch input | | | | | | | | | | | | | | |
| 22 | SW2 | I | EMPHASIS switch input | | | | | | | | | | | | | | |
| 23 | | O | Not used. | | | | | | | | | | | | | | |
| 24 | D0 | I/O | } Meter IC (MSM6338) 4-bit data bus | | | | | | | | | | | | | | |
| 25 | D1 | I/O | | | | | | | | | | | | | | | |
| 26 | D2 | I/O | | | | | | | | | | | | | | | |
| 27 | D3 | I/O | | | | | | | | | | | | | | | |
| 28 | A0 | O | } Meter IC (MSM6338) 4-bit address bus | | | | | | | | | | | | | | |
| 29 | A1 | O | | | | | | | | | | | | | | | |
| 30 | A2 | O | | | | | | | | | | | | | | | |
| 31 | A3 | O | } Not used. | | | | | | | | | | | | | | |
| 32 | AN0 | I | INPUT SELECT switch input (A/D port) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Switch</th> <th>MIC</th> <th>LINE</th> <th>COAXIAL</th> <th>OPT1</th> <th>OPT2</th> <th>MICATT</th> </tr> </thead> <tbody> <tr> <td>Voltage (Vdc)</td> <td>0.0</td> <td>0.6</td> <td>1.3</td> <td>1.9</td> <td>2.5</td> <td>5.0</td> </tr> </tbody> </table> | Switch | MIC | LINE | COAXIAL | OPT1 | OPT2 | MICATT | Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 2.5 | 5.0 |
| Switch | MIC | LINE | COAXIAL | OPT1 | OPT2 | MICATT | | | | | | | | | | | |
| Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 1.9 | 2.5 | 5.0 | | | | | | | | | | | |
| 33 | AN1 | I | REC MODE switch input (A/D port) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Switch</th> <th>MARGIN RESET</th> <th>LONG</th> <th>48K</th> <th>44.1K</th> </tr> </thead> <tbody> <tr> <td>Voltage (Vdc)</td> <td>0.0</td> <td>0.6</td> <td>1.3</td> <td>5.0</td> </tr> </tbody> </table> | Switch | MARGIN RESET | LONG | 48K | 44.1K | Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 5.0 | | | | |
| Switch | MARGIN RESET | LONG | 48K | 44.1K | | | | | | | | | | | | | |
| Voltage (Vdc) | 0.0 | 0.6 | 1.3 | 5.0 | | | | | | | | | | | | | |
| 34 | AN2 | I | } Not used. Fixed to "H". | | | | | | | | | | | | | | |
| 35 | AN3 | I | | | | | | | | | | | | | | | |

| Pin | Signal Name | I/O | Function |
|----------|---------------|-----|---|
| 36 | AN4 | I | } Not used. Connected to GND. |
| 37 | AN5 | I | |
| 38 | X RST | I | System reset input. "L": Reset. |
| 39 | EXTAL | I | Clock oscillation input (4.19 MHz) |
| 40 | XTAL | O | Clock oscillation input (4.19 MHz) |
| 41 | Vss | — | GND |
| 42 | TX | O | } Not used (open). |
| 43 | TEX | I | |
| 44 | AN6 | I | } Not used. Fixed to "H". |
| 45 | AN7 | I | |
| 46 | AVREF | — | A/D port reference voltage. Connected to +5V. |
| 47 | AVss | — | A/D port GND. Connected to GND. |
| 48 to 79 | SEG0 to SEG31 | O | FL display segment drive output |
| 80 | | O | } Not used. |
| 81 | | O | |
| 82 | | O | |
| 83 | | O | |
| 84 to 87 | G4 to G1 | O | FL display grid drive output |
| 88 | VFDP | — | -25V power supply for driving FL display |
| 89 | VDD | — | +5V power supply |
| 90 | — | — | Connected to +5V. |
| 91 | GND | — | GND |
| 92 | PG0 | O | "TAPE" LED light output. "H": Light. |
| 93 | PG1 | O | } Not used. |
| 94 | PG2 | O | |
| 95 | PG3 | O | |
| 96 | PG4 | O | |
| 97 | PG5 | O | |
| 98 | PG6 | O | |
| 99 | PG7 | O | |
| 100 | SBSY | I | |

• IC652 METER IC (MSM6338MS)

| Pin | Signal Name | I/O | Function |
|-----|-----------------|-------|---|
| 1 | DATA | I | fs serial data input (2's complement) |
| 2 | BCK | I | fs serial data fetch clock (bit clock) |
| 3 | LRCK | I | fs input Lch/Rch discrimination signal. "H": Rch, "L": Lch. |
| 4 | XRESET | I | Reset input. "L": Reset. |
| 5 | XWR | I | Data write request input (data write at rising edge) |
| 6 | XRD | I | Data read request input ("L": Read enable) |
| 7 | XCE | I | Chip select input ("L": Select) |
| 8 | V _{SS} | — | GND |
| 9 | D0 | I/O/Z | 4-bit data bus (tristate) |
| 10 | — | | Not used (open). |
| 11 | D1 | I/O/Z | } 4-bit data bus (tristate) |
| 12 | D2 | I/O/Z | |
| 13 | D3 | I/O/Z | |
| 14 | A0 | I | } Address input. Selects internal register. |
| 15 | A1 | I | |
| 16 | V _{DD} | — | +5V power supply |

• IC901 MECHANISM MICROPROCESSOR (CXP87532-006Q)

| Pin | Signal Name | I/O | Function |
|-----|-------------|-----|--|
| 1 | FP KICK | O | FWD plunger kick control output |
| 2 | C DIR RVS | O | Capstan rotation direction control output. "H": FWD, "L": RVS. |
| 3 | PLN ON | O | Brake plunger ON control output |
| 4 | PLN KICK | O | Brake plunger kick control output |
| 5 | D ON | O | Drum motor ON control output |
| 6 | D DIR RVS | O | } Not used. |
| 7 | ATF M/XS | I | |
| 8 | LD8 RF | O | |
| 9 | | O | |
| 10 | | O | |
| 11 | | O | |
| 12 | | O | |
| 13 | MCH-ACT | O | |
| 14 | | O | |
| 15 | LE | O | Loading motor rotation direction control output. Eject direction. |
| 16 | LL | O | Loading motor rotation direction control output. Loading direction. |
| 17 | CAS M OUT | O | Cassette compartment motor rotation direction control output. OUT direction. |
| 18 | CAS M IN | O | Cassette compartment motor rotation direction control output. IN direction. |
| 19 | X ROM SEL | O | EEPROM chip select output |
| 20 | | O | } Not used. |
| 21 | | O | |
| 22 | | O | |
| 23 | | I | } Not used. Connected to "H". |
| 24 | | I | |
| 25 | CAS IN | I | Cassette IN switch input |
| 26 | REC EN | I | REC enable switch input |
| 27 | CAS LCK | I | Cassette compartment lock switch input |
| 28 | CAS OUT | I | Cassette compartment OUT switch input |
| 29 | UNLD SW | I | UNLD switch input. "H": UNLOAD position. |
| 30 | LD SW | I | LD switch input. "H": STOP position. |
| 31 | | O | } Not used. |
| 32 | | O | |
| 33 | | O | |
| 34 | | O | |
| 35 | | I | } Not used. Fixed to "H". |
| 36 | | I | |
| 37 | | I | |
| 38 | | I | |
| 39 | MP | | Connected to GND. |
| 40 | X RST | I | Reset input. "L": Reset. |

| Pin | Signal Name | I/O | Function |
|-----|-------------|-----|--|
| 41 | Vss | — | GND |
| 42 | XTAL | O | Crystal oscillation output (9.408 MHz) |
| 43 | EXTAL | I | Crystal oscillation input (9.408 MHz) |
| 44 | X MECH BSY | O | Mechanism microprocessor BUSY signal output |
| 45 | | O | Not used. |
| 46 | T LED ON | O | T side end sensor ON output. "H": ON. |
| 47 | S LED ON | O | S side end sensor ON output. "H": ON. |
| 48 | X SBSY | I | SUB SYNC input from CXD2605 |
| 49 | ROM DT IN | I | Data input from EEPROM |
| 50 | ROM DT OUT | O | Data output to EEPROM |
| 51 | ROM CK | O | Serial clock output to EEPROM |
| 52 | X MECH REQ | I | Communication request input from main microprocessor |
| 53 | C DT IN | I | Serial data input from main microprocessor |
| 54 | M DT OUT | O | Serial data output to main microprocessor |
| 55 | X SR CK | I | Serial clock input from main microprocessor |
| 56 | AVss | — | A/D port GND. Connected to GND. |
| 57 | AVREF | — | A/D port reference voltage. Connected to +5V. |
| 58 | AVDD | — | A/D port power supply. |
| 59 | T END | I | T side end sensor input |
| 60 | S END | I | S side end sensor input |
| 61 | | I | Fixed to "H". |
| 62 | X ROM BSY | I | BUSY signal input from EEPROM. |
| 63 | | I | Not used. |
| 64 | | I | } Not used. Fixed to "H". |
| 65 | | I | |
| 66 | ATF IN | I | ATF pilot signal input |
| 67 | FG T | I | T side reel FG signal input |
| 68 | FG S | I | S side reel FG signal input |
| 69 | C FG | I | Capstan FG signal input |
| 70 | D FG | I | Drum FG signal input |
| 71 | D PG | I | Drum PG signal input |
| 72 | D REF | I | Drum reference signal input |
| 73 | ATF S2 | I | DPG auto control FRC signal input |
| 74 | | I | Not used. Fixed to "H". |
| 75 | | O | Not used. |
| 76 | X CAS TEST | I | Test pin. "L": Test mode with no cassette compartment. |
| 77 | MST CK | I | Master clock input |
| 78 | PB DET | I | ATF SYNC PB data |
| 79 | SWP | O | Switching pulse output |
| 80 | AGC PWM | O | AGC PWM signal output |

| Pin | Signal Name | I/O | Function |
|-----|-------------|-----|---|
| 81 | PWM T | O | T side reel PWM signal output |
| 82 | PWM S | O | S side reel PWM signal output |
| 83 | D PWM | O | Drum PWM signal output |
| 84 | C PWM | O | Capstan PWM signal output |
| 85 | | I | Not used. Fixed to "H". |
| 86 | X TEST | I | Test pin. "L": Test mode. (Commonly used for D PG, PATH, torque.) |
| 87 | POW DN | I | Not used. Fixed to "H". |
| 88 | Vss | – | GND |
| 89 | VDD | – | +5V power supply |
| 90 | VPP | – | Connected to +5V. |
| 91 | ATF S2 | O | ATF sampling pulse #2 output. |
| 92 | AREA | O | AREA signal output |
| 93 | | O | } Not used. |
| 94 | | O | |
| 95 | | O | |
| 96 | X LP REC | O | LP REC control output. "L": LP mode REC. |
| 97 | | O | } Not used. |
| 98 | | O | |
| 99 | X T LOCK | O | Reel motor T LOCK control output. "L": T LOCK. |
| 100 | FP ON | O | FWD plunger ON control output. |

SECTION 5

EXPLODED VIEWS

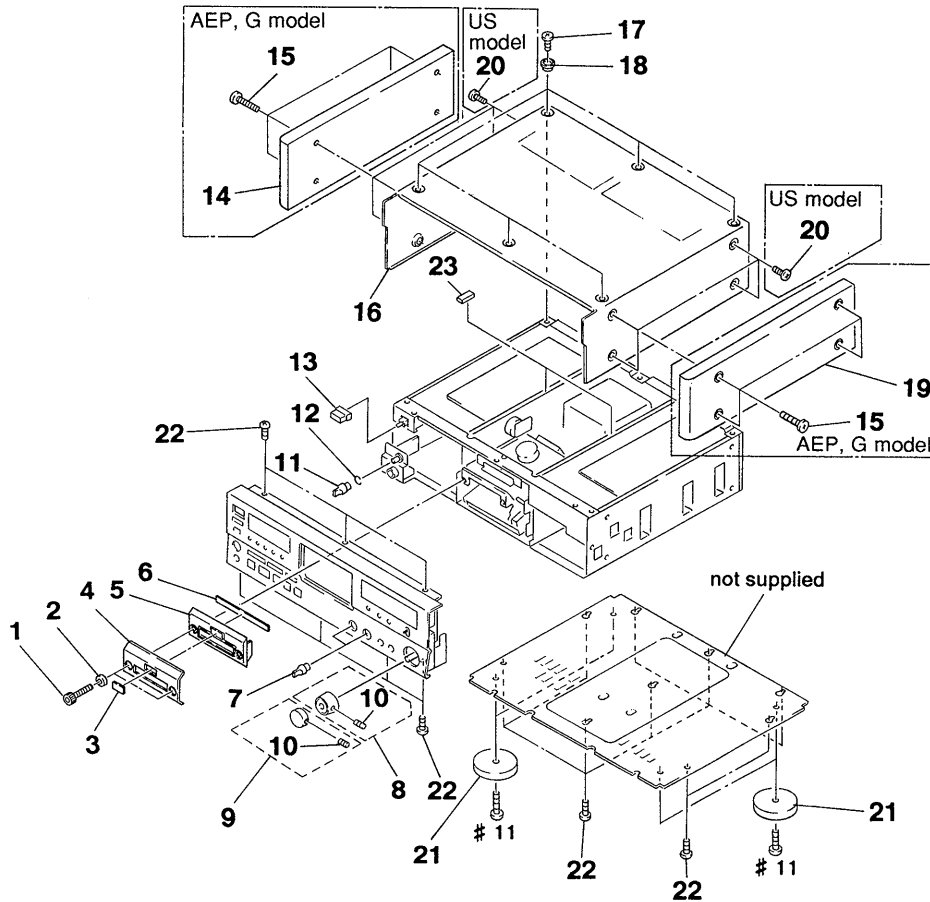
NOTE:

- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
 KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts color Cabinet's color

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- G : German model

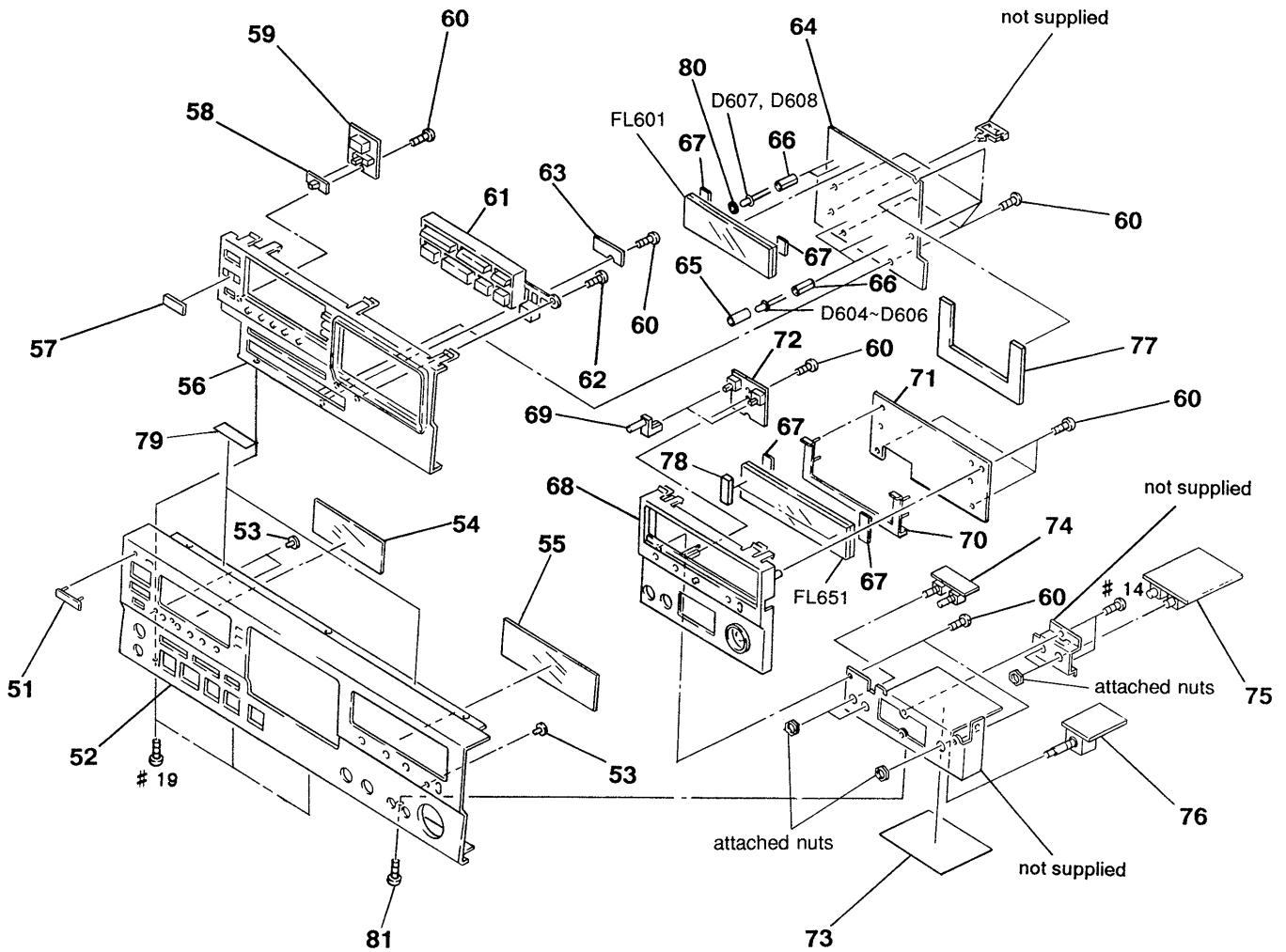
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

5-1. CASE AND SIDE PANEL ASSEMBLY



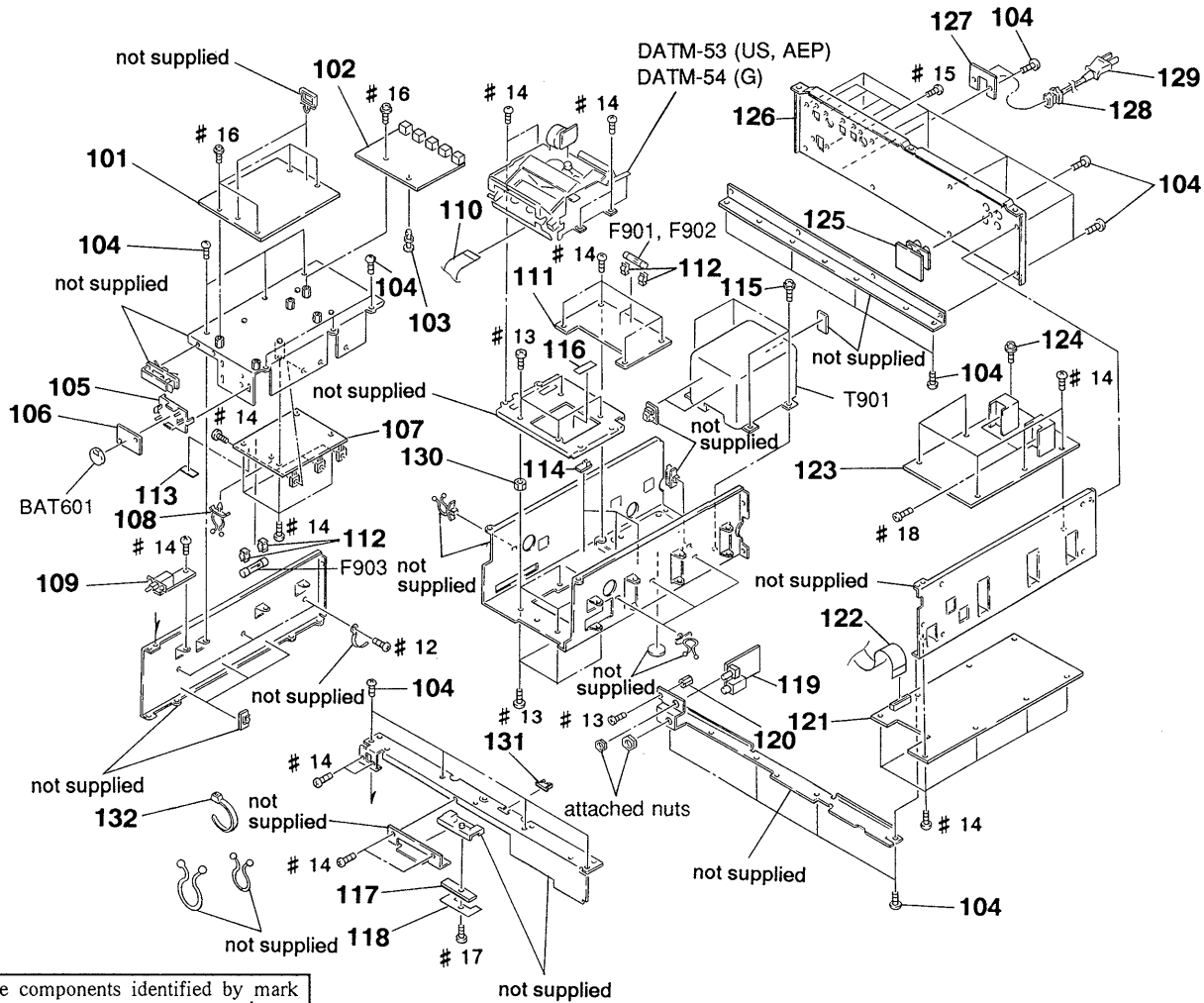
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------------------|--------|----------|--------------|--------------------------------------|--------|
| * 1 | 3-910-074-01 | BOLT (M3) (GOLD) | | 12 | 3-354-981-01 | SPRING (SUS), RING (BLACK) | |
| 1 | 7-683-406-04 | BOLT, HEXAGON SOCKET 3X12 (BLACK) | | 12 | 3-356-935-01 | SPRING (GOLD) | |
| 2 | 3-909-241-01 | BASE, ORNAMENTAL (GOLD) | | 13 | 4-917-460-01 | KNOB, POWER (BLACK) | |
| 2 | 3-909-241-11 | BASE, ORNAMENTAL (BLACK) | | 13 | 4-917-460-51 | KNOB, POWER (GOLD) | |
| 3 | 4-936-615-01 | PLATE (DAT LOGO), ORNAMENTAL (BLACK) | | 14 | X-3304-970-1 | PANEL (L) ASSY, SIDE (BLACK) | |
| 3 | 4-936-615-11 | PLATE (DAT LOGO), ORNAMENTAL (GOLD) | | 14 | X-3363-492-2 | PANEL (L) ASSY, SIDE (GOLD) (AEP, G) | |
| 4 | 3-906-274-01 | PANEL (CASSETTE COMPARTMENT) (GOLD) | | 15 | 4-885-979-11 | SCREW (4X25) (AEP, G) | |
| 4 | 3-906-274-11 | PANEL (CASSETTE COMPARTMENT) (BLACK) | | * 16 | 3-908-784-11 | CASE (GOLD) | |
| 5 | X-3367-736-1 | ESCUTCHEON ASSY (BLACK) | | * 16 | 3-908-784-31 | CASE (BLACK) | |
| 5 | X-3367-268-2 | ESCUTCHEON ASSY (GOLD) | | 17 | 3-704-366-01 | SCREW (CASE) (M3X8) (BLACK) | |
| 6 | 3-909-242-01 | SPACER | | 17 | 3-704-366-11 | SCREW (CASE) (M3X8) (GOLD) | |
| 7 | X-3362-818-1 | KNOB (DIA. 12) ASSY (B), FLAT (BLACK) | | 18 | 4-923-474-01 | RING, ORNAMENTAL (BLACK) | |
| 7 | X-3363-490-1 | KNOB (DIA. 12) ASSY (B), FLAT (GOLD) | | 18 | 4-923-474-11 | RING, ORNAMENTAL (GOLD) | |
| 8 | X-3362-380-1 | KNOB (REC-R) ASSY (BLACK) | | 19 | X-3304-969-1 | PANEL (R) ASSY, SIDE (BLACK) | |
| 8 | X-3363-175-1 | KNOB (REC-R) ASSY (GOLD) | | 19 | X-3363-493-2 | PANEL (R) ASSY, SIDE (GOLD) (AEP, G) | |
| 9 | X-3362-381-1 | KNOB (REC-L) ASSY (BLACK) | | 20 | 4-847-802-11 | SCREW (US) | |
| 9 | X-3363-176-1 | KNOB (REC-L) ASSY (GOLD) | | 21 | X-4922-549-1 | FOOT ASSY (BLACK) | |
| 10 | 3-701-506-01 | SET SCREW, DOUBLE POINT 3X4 | | 21 | X-4941-711-1 | FOOT ASSY (GOLD) | |
| 11 | 3-354-931-01 | KNOB (DIA. 10) (BLACK) | | 22 | 3-703-685-21 | SCREW (+BV 3X8) | |
| 11 | 3-354-931-31 | KNOB (DIA. 10) (GOLD) | | 23 | 9-911-842-XX | CUSHION (S) | |

5-2. FRONT PANEL ASSEMBLY



| Ref.No. | Part No. | Description | Remark | Ref.No. | Part No. | Description | Remark |
|---------|--------------|------------------------------------|--------|---------|--------------|-------------------------------------|--------|
| 51 | 4-942-568-01 | EMBLEM (NO. 5), SONY (BLACK) | | 65 | 3-909-243-01 | TUBE (LED), RUBBER | |
| 51 | 4-942-568-11 | EMBLEM (NO. 5), SONY (GOLD) | | * 66 | 4-911-676-41 | SPACER, LED | |
| 52 | 3-906-267-01 | PANEL, FRONT (GOLD) (AEP) | | 67 | 9-911-839-XX | CUSHION | |
| 52 | 3-906-267-11 | PANEL, FRONT (BLACK) (AEP) | | 68 | 3-906-273-01 | ESCUTCHEON (R) (GOLD) | |
| 52 | 3-906-267-21 | PANEL, FRONT (GOLD) (US) | | 68 | 3-906-273-11 | ESCUTCHEON (R) (BLACK) | |
| 52 | 3-906-267-31 | PANEL, FRONT (BLACK) (G) | | 69 | 4-923-879-01 | BUTTON (DIA. 4) (BLACK) | |
| 52 | 3-906-267-41 | PANEL, FRONT (GOLD) (G) | | 69 | 4-923-879-31 | BUTTON (DIA. 4) (GOLD) | |
| 53 | 4-925-327-01 | INDICATOR | | * 70 | 3-385-607-01 | HOLDER, FL TUBE | |
| 54 | 3-906-269-01 | WINDOW (ANALOG) | | * 71 | A-2007-083-A | PANEL (R) BOARD, COMPLETE (AEP, US) | |
| 55 | 3-906-268-01 | WINDOW (DIGITAL) | | * 71 | A-2007-187-A | PANEL (R) BOARD, COMPLETE (G) | |
| 56 | 3-906-258-01 | ESCUTCHEON (L) (GOLD) | | * 72 | 1-650-797-11 | SMB SW BOARD | |
| 56 | 3-906-258-11 | ESCUTCHEON (L) (BLACK) | | * 73 | 3-908-785-01 | SHEET (REC) | |
| 57 | 3-364-919-01 | FILTER | | * 74 | 1-650-799-11 | MODE SW BOARD | |
| 58 | 4-922-518-01 | KNOB (TIMER) (BLACK) | | * 75 | A-2007-097-A | MIC AMP BOARD, COMPLETE | |
| 58 | 4-922-518-62 | KNOB (TIMER) (GOLD) | | * 76 | 1-650-805-11 | REC VOL BOARD | |
| * 59 | 1-650-794-11 | REMOTE CONTROL BOARD | | * 77 | 3-908-782-01 | HOLDER (FL TUBE) | |
| 60 | 4-951-620-01 | SCREW (2. 6X8), +BVTP | | 78 | 4-908-075-11 | CUSHION (AEP, US) | |
| 61 | X-3367-267-1 | BUTTON (MAIN) ASSY (GOLD) | | * 79 | 3-846-311-00 | SPACER (D) | |
| 61 | X-3367-735-1 | BUTTON (MAIN) ASSY (BLACK) | | 80 | 3-661-784-00 | TUBE (DIA. 6), RUBBER | |
| 62 | 3-372-761-01 | SCREW (M1. 7X4), TAPPING | | 81 | 3-703-685-21 | SCREW (+BV 3X8) | |
| * 63 | 1-650-793-11 | EJECT SW BOARD | | FL601 | 1-517-271-11 | INDICATOR TUBE, FLUORESCENT | |
| * 64 | A-2007-186-A | PANEL (L) BOARD, COMPLETE (AEP, G) | | FL651 | 1-517-272-11 | INDICATOR TUBE, FLUORESCENT | |
| * 64 | A-2007-193-A | PANEL (L) BOARD, COMPLETE (US) | | | | | |

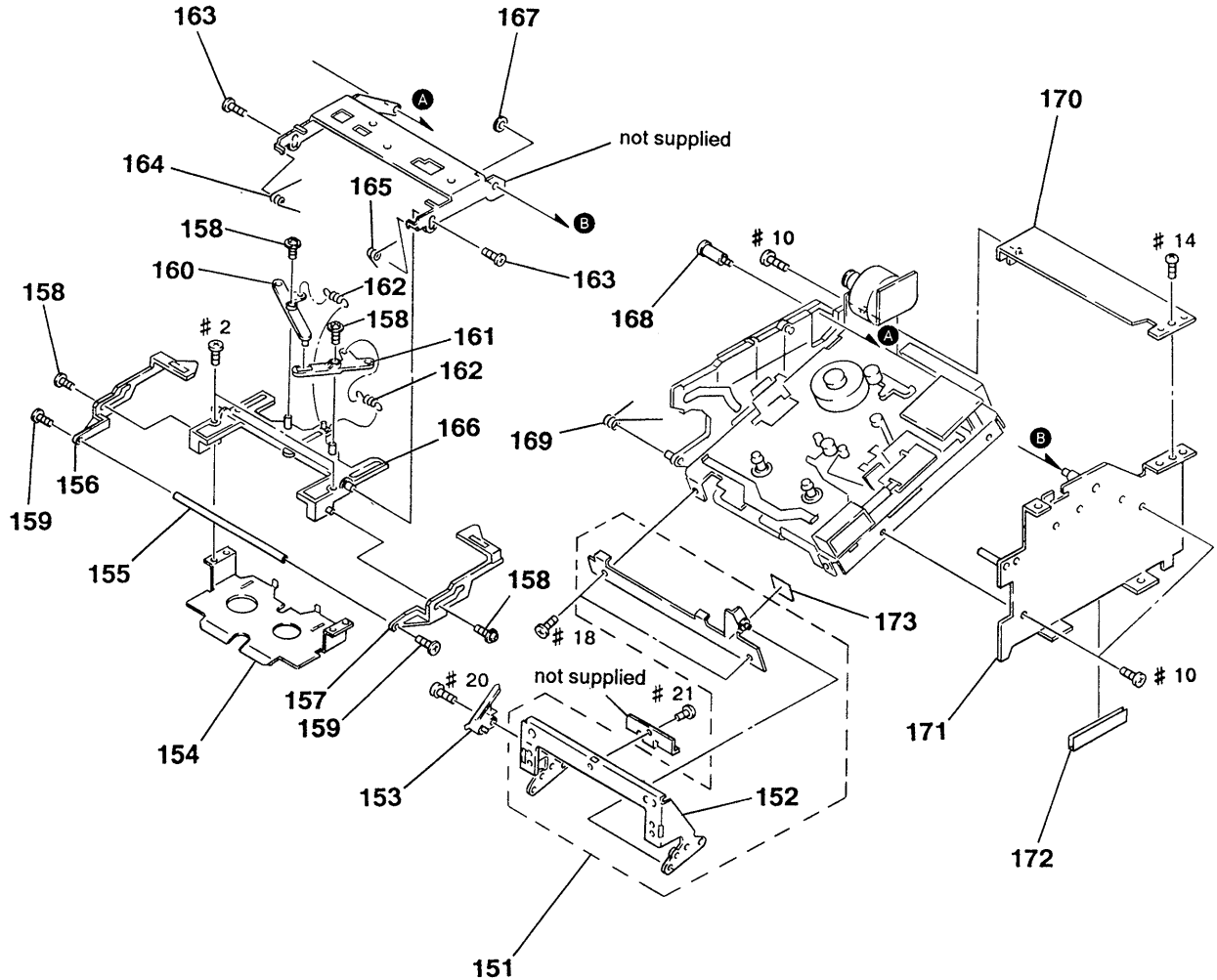
5-3. CHASSIS ASSEMBLY



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

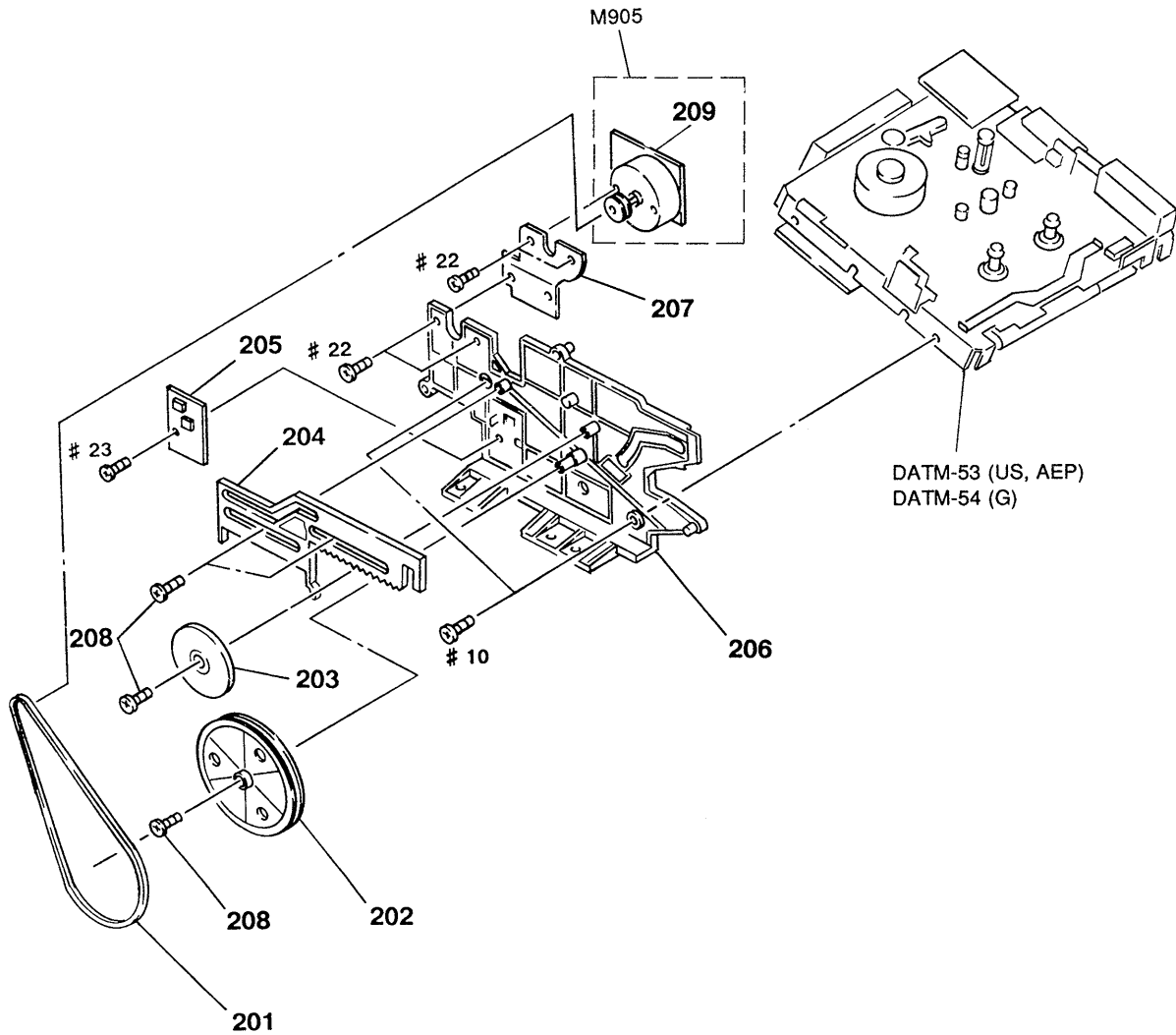
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------------------|--------|------------------|--------------|--------------------------------------|--------|
| * 101 | A-2007-092-A | MAIN BOARD, COMPLETE (AEP, US) | | 122 | 1-751-977-11 | WIRE (FLAT TYPE) (23 CORE) | |
| * 101 | A-2007-184-A | MAIN BOARD, COMPLETE (G) | | * 123 | A-2007-246-A | AD BOARD, COMPLETE (US) | |
| * 102 | A-2007-091-A | D I/O BOARD, COMPLETE | | * 123 | A-2007-242-A | AD BOARD, COMPLETE (AEP, G) | |
| * 103 | 4-958-674-01 | SPACER, MINIATURE CARD | | 124 | 4-886-821-11 | SCREW, S TIGHT, +PTTWH 3X6 | |
| 104 | 3-703-685-21 | SCREW (+BV 3X8) | | * 125 | 1-650-807-11 | PIN JACK BOARD | |
| * 105 | 3-382-640-11 | HOLDER (BATTERY) | | * 126 | 3-906-265-21 | PANEL, BACK (GOLD) (US) | |
| * 106 | 1-650-800-11 | BATTERY BOARD | | * 126 | 3-906-265-41 | PANEL, BACK (GOLD) (AEP, G) | |
| * 107 | A-2007-087-A | POWER BOARD, COMPLETE (AEP, G) | | * 126 | 3-906-265-31 | PANEL, BACK (BLACK) (AEP, G) | |
| * 107 | A-2007-234-A | POWER BOARD, COMPLETE (US) | | * 127 | 4-923-873-01 | BRACKET, CORD STOPPER | |
| 108 | 4-953-346-01 | CLAMP, LEAD | | * 128 | 3-703-244-00 | BUSHING (2104), CORD (AEP, G) | |
| * 109 | 1-650-795-11 | AC SW BOARD | | 128 | 4-916-783-01 | BUSHING, CORD (US) | |
| 110 | 1-751-976-11 | WIRE (FLAT TYPE) (17 CORE) | | \triangle 129 | 1-559-479-11 | CORD, POWER (US) | |
| * 111 | A-2007-099-A | RECT BOARD, COMPLETE (US) | | \triangle 129 | 1-575-912-11 | CORD, POWER (AEP, G) | |
| * 111 | A-2007-243-A | RECT BOARD, COMPLETE (AEP, G) | | 130 | 3-908-776-01 | SHAFT (MD LOWER) | |
| * 112 | 1-533-293-11 | FUSE HOLDER | | 131 | 3-383-699-01 | CLAMP (EDGE) | |
| * 113 | 3-701-946-24 | LABEL, FUSE RATING (US) | | 132 | 3-655-653-21 | BAND (TAITON), BINDING | |
| * 114 | 4-617-314-01 | CLAMP | | BAT601 | 1-528-229-11 | BATTERY, LITHIUM CR-2450 | |
| 115 | 4-820-330-31 | SCREW | | \triangle F901 | 1-532-286-00 | FUSE, TIME-LAG (2.5A, 250V) (AEP, G) | |
| * 116 | 3-846-311-00 | SPACER (D) | | \triangle F901 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| * 117 | 1-650-798-11 | LED BOARD | | \triangle F902 | 1-532-286-00 | FUSE, TIME-LAG (2.5A, 250V) (AEP, G) | |
| 118 | 3-908-888-01 | SHEET (LED) | | \triangle F902 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| * 119 | 1-650-808-11 | HP BOARD | | \triangle F903 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| * 120 | 3-718-661-01 | SUPPORT, TC | | \triangle T901 | 1-426-719-11 | TRANSFORMER, POWER (AEP, G) | |
| * 121 | A-2007-245-A | DA BOARD, COMPLETE (US) | | \triangle T901 | 1-426-796-11 | TRANSFORMER, POWER (US) | |
| * 121 | A-2007-241-A | DA BOARD, COMPLETE (AEP, G) | | | | | |

5-4. CASSETTE COMPARTMENT ASSEMBLY (1)



| Ref.No. | Part No. | Description | Remark | Ref.No. | Part No. | Description | Remark |
|---------|--------------|--------------------------------|--------|---------|--------------|--------------------------|--------|
| * 151 | X-3367-635-1 | PLATE ASSY, FULCRUM | | 163 | 3-318-203-61 | SCREW (Bl. 7X4), TAPPING | |
| 152 | 3-373-225-01 | HOLDER (WINDOW) | | 164 | 3-373-216-01 | SPRING (L), TORISION | |
| 153 | 3-373-220-01 | ARM (JOINT) | | 165 | 3-373-215-01 | SPRING (R), TORISION | |
| 154 | 3-373-224-01 | HOLDER (LOWER) | | 166 | 3-373-237-03 | HOLDER (UPPER), CASSETTE | |
| * 155 | 3-373-217-01 | SHAFT (JOINT) | | 167 | 3-307-948-21 | WASHER, NYLON | |
| 156 | 3-373-223-01 | SLIDER (L) | | 168 | 4-931-471-01 | SCREW (STEP) | |
| 157 | 3-373-222-01 | SLIDER (R) | | 169 | 3-373-212-01 | SPRING (CASSETTE) | |
| 158 | 3-318-201-11 | SCREW (B) (1.4X3), TAPPING | | * 170 | 3-909-720-01 | REINFORCEMENT | |
| 159 | 3-345-648-01 | SCREW (M1.4X3.0), TOOTHED LOCK | | * 171 | X-3367-634-1 | PLATE (R) ASSY, SIDE | |
| 160 | 3-373-219-01 | LEVER (L) | | * 172 | 4-913-782-11 | CUSHION (2), BUTTON | |
| 161 | 3-373-218-01 | LEVER (R) | | 173 | 3-908-780-01 | SHEET | |
| 162 | 3-632-859-00 | SPRING, BRAKE LEVER RETURN | | | | | |

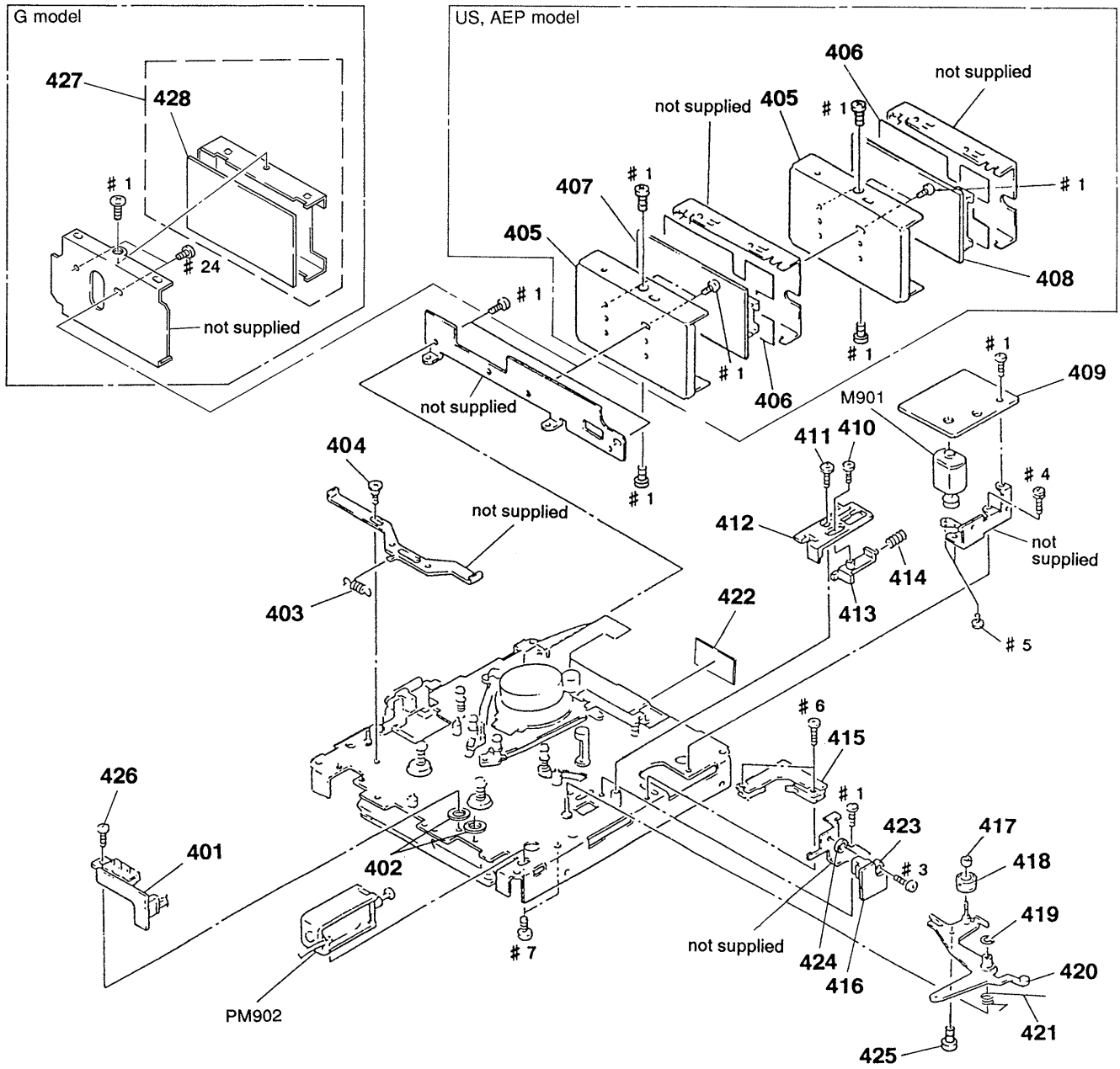
5-5. CASSETTE COMPARTMENT ASSEMBLY (2)



| Ref. No. | Part No. | Description |
|----------|--------------|--------------------|
| 201 | 4-931-470-01 | BELT (DRIVING) |
| 202 | 3-373-214-01 | PULLEY |
| 203 | 3-373-213-01 | GEAR, DRIVING |
| * 204 | X-3364-426-1 | SLIDER ASSY |
| * 205 | 1-641-487-11 | CASSE-COM SW BOARD |

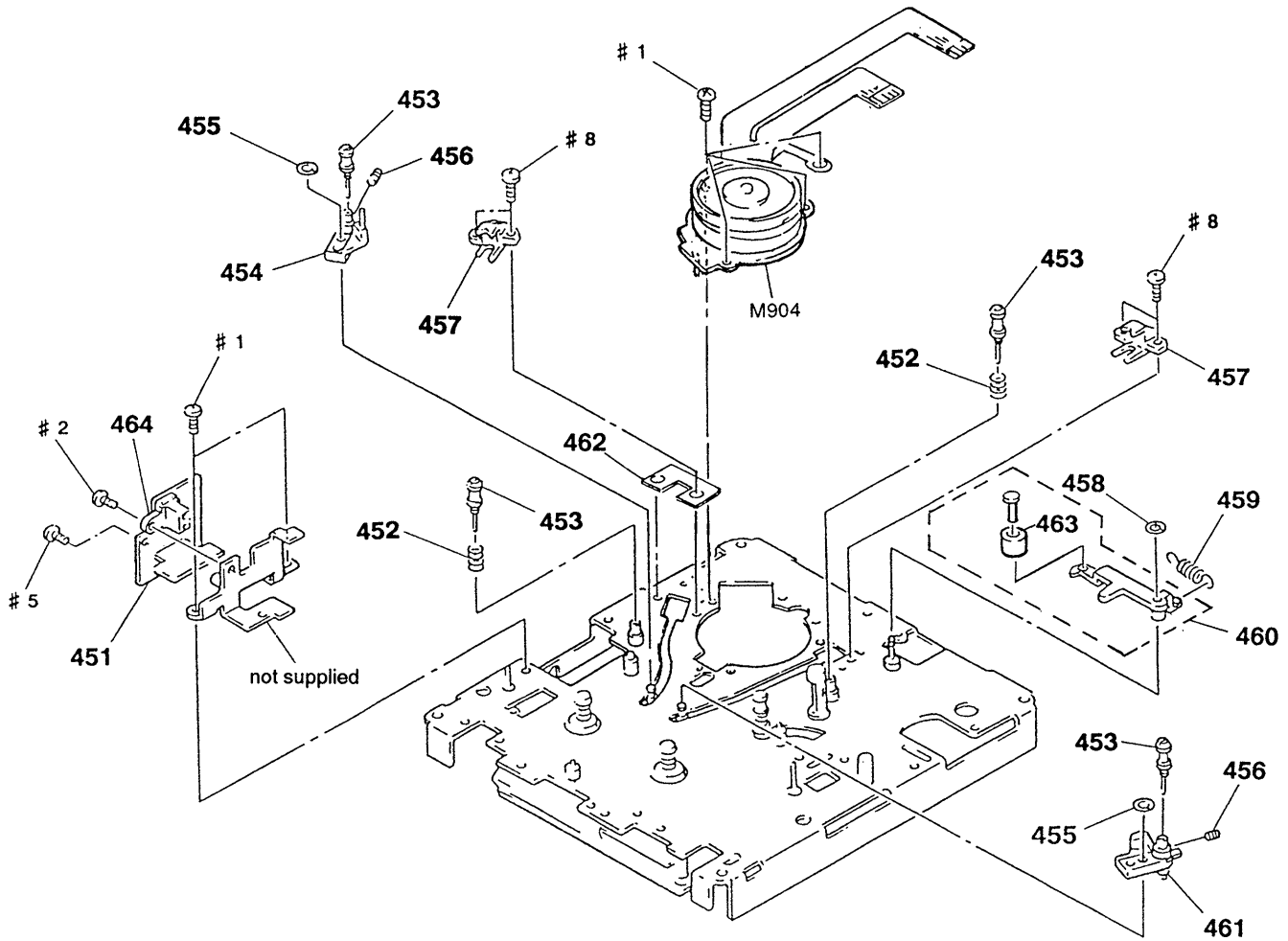
| Remark | Ref. No. | Part No. | Description | Remark |
|--------|----------|--------------|--------------------------|--------|
| | 206 | 3-373-234-05 | CHASSIS (L) | |
| | * 207 | 3-908-788-01 | BRACKET (MOTOR) | |
| | 208 | 2-623-756-01 | SCREW, (B1.7X3), TAPPING | |
| | * 209 | 1-641-486-11 | CASSE-COM MOTOR BOARD | |
| | M905 | A-2003-910-A | MOTOR ASSY, CASSETTE | |

5-6. MECHANISM DECK ASSEMBLY (1)
(DATM-53: US, AEP model)
(DATM-54: G model)



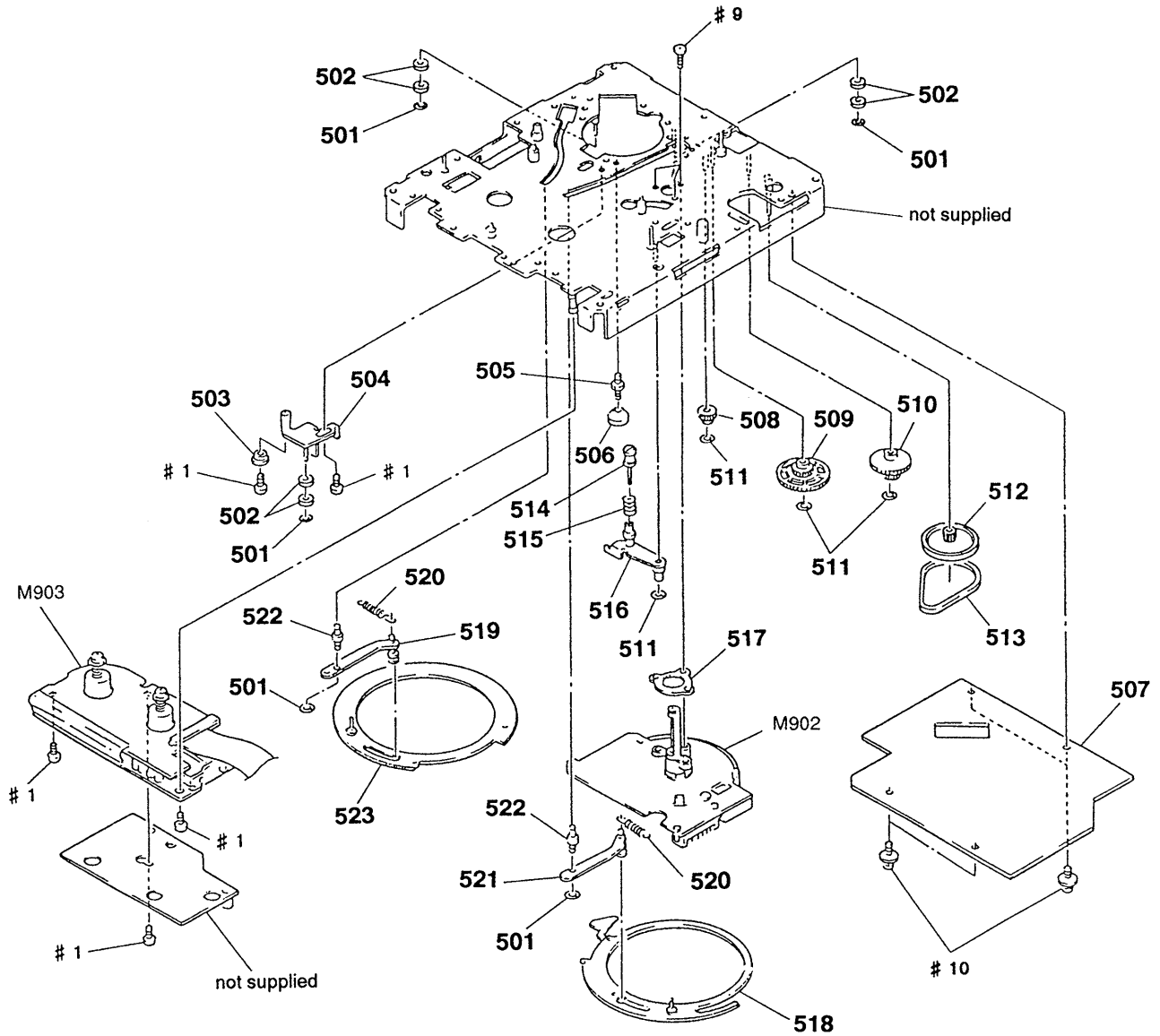
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|----------|--------------|-------------------------------|--------|
| * 401 | 1-650-814-11 | CAS IN BOARD | | * 416 | 1-650-812-11 | T-END BOARD | |
| 402 | 3-344-781-01 | WASHER, POLYETHYLENE | | 417 | 3-337-626-01 | CAP, PINCH ROLLER | |
| 403 | 3-307-375-00 | SPRING, TENSION | | 418 | X-3337-610-1 | PINCH ROLLER ASSY | |
| 404 | 3-312-161-00 | SCREW, STEP, PRECISION | | 419 | 3-701-436-11 | WASHER, STOPPER | |
| * 405 | 3-337-686-11 | CASE (LOWER), SHIELD (AEP, US) | | 420 | X-3362-021-1 | LEVER (PINCH ROLLER) ASSY | |
| * 406 | 3-362-537-01 | SHEET (RF) (AEP, US) | | 421 | 3-367-352-01 | SPRING (PINCH) | |
| * 407 | A-2006-207-A | RF AMP (PB) BOARD, COMPLETE (AEP, US) | | 422 | 3-366-886-01 | SHEET (RF BRACKET) | |
| * 408 | A-2006-561-A | RF AMP (REC/PB) BOARD, COMPLETE (AEP, US) | | 423 | A-2004-299-A | DETECTION (R) ASSY, E | |
| * 409 | 1-650-813-11 | LOADING MOTOR BOARD | | * 424 | 4-913-524-01 | SPACER, REST | |
| 410 | 2-623-756-01 | SCREW, (B1.7X3), TAPPING | | 425 | 3-704-244-01 | SCREW (P1.7X1.6) | |
| 411 | 3-703-502-11 | SCREW | | 426 | 3-321-041-01 | SCREW (M1.7X3.5), TAPPING | |
| 412 | 3-362-148-01 | SLIDER (PINCH) | | * 427 | A-2001-587-A | RF COMPLETE ASSY (G) | |
| 413 | 3-362-149-01 | SLIDER (LIMITTER) | | * 428 | A-2006-455-A | RF AMP BOARD, COMPLETE (G) | |
| 414 | 3-564-035-00 | SPRING, COMPRESSION | | M901 | A-2004-301-A | MOTOR ASSY, CONTROL (LOADING) | |
| * 415 | 1-650-811-11 | LOAD SW BOARD | | PM902 | 1-454-522-11 | SOLENOID, PLUNGER (FWD) | |

5-7. MECHANISM DECK ASSEMBLY (2)
(DATM-53: US, AEP model)
(DATM-54: G model)



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------|--------|----------|--------------|---------------------------------|--------|
| * 451 | 1-650-815-11 | S-END BOARD | | 459 | 3-307-375-00 | SPRING, TENSION | |
| 452 | 3-573-470-00 | SPRING, COMPRESSION | | 460 | A-2003-487-A | ARM (CLEANING) ASSY | |
| 453 | X-3362-027-1 | GUIDE ASSY, ROLLER | | 461 | X-3362-029-1 | SLANT BLOCK (R2) ASSY | |
| 454 | X-3362-028-1 | SLANT BLOCK (L2) ASSY | | 462 | 3-701-437-01 | SHEET (CATCHER) (AEP, US) | |
| 455 | 3-341-752-11 | WASHER, POLYETHYLENE | | 463 | X-3337-655-1 | ROLLER (CLEANER) ASSY | |
| 456 | 3-362-152-01 | SCREW (RETURN GUIDE BOSS) | | 464 | A-2004-300-A | DETECTION (L) ASSY, E | |
| * 457 | 3-337-685-01 | CATCHER (AEP, US) | | M904 | 8-848-549-11 | DRUM ASSY (DOU-15A-R) (AEP, US) | |
| * 457 | 3-912-011-01 | CATCHER (G) | | M904 | 8-848-626-01 | DRUM ASSY (DOU-03D-R) (G) | |
| 458 | 3-701-436-11 | WASHER, STOPPER | | | | | |

5-8. MECHANISM DECK ASSEMBLY (3)
(DATM-53: US, AEP model)
(DATM-54: G model)



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------------------|--------|----------|--------------|--|--------|
| 501 | 3-559-408-11 | WASHER, POLYETHYLENE, DIA. 1.2 | | 514 | X-3362-027-1 | GUIDE ASSY, ROLLER | |
| 502 | 3-337-622-01 | ROLLER, RING | | 515 | 3-573-470-00 | SPRING, COMPRESSION | |
| * 503 | 3-362-158-01 | COLLAR (RING ADJUSTMENT) | | * 516 | X-3362-020-1 | LEVER (F GUIDE) ASSY | |
| * 504 | X-3362-023-1 | ARM (RING ROLLER) ASSY | | * 517 | 3-362-156-01 | BRACKET (CAPSTAN) | |
| * 505 | 3-362-159-01 | SHAFT (RING ADJUSTMENT) | | 518 | X-3362-204-1 | GEAR (LOAD) ASSY | |
| 506 | 3-362-160-01 | NUT (RING ADJUSTMENT) | | * 519 | X-3362-024-1 | LEVER (LOADING L) ASSY | |
| * 507 | A-2007-075-A | MD BOARD, COMPLETE | | 520 | 3-337-653-01 | SPRING, TENSION | |
| 508 | 3-372-619-01 | GEAR | | * 521 | X-3362-025-1 | LEVER (LOADING R) ASSY | |
| 509 | 3-345-181-01 | GEAR (LOADING A) | | 522 | 3-362-151-01 | BOSS (GUIDE) | |
| 510 | 3-362-155-01 | GEAR (A) | | 523 | X-3337-602-1 | RING (LEFT) ASSY, LOADING | |
| 511 | 3-701-436-11 | WASHER, STOPPER | | M902 | 8-835-306-01 | MOTOR, DC U-17A (CAPSTAN) | |
| 512 | 4-932-338-01 | PULLEY (A) | | * M903 | 8-835-205-01 | MOTOR, DC U-2A (REEL) (included PM901) | |
| 513 | 4-913-325-01 | BELT, TAKE-UP | | | | | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------------|--------------|-------------------------|--------|----------|--------------|--------------------|---------------|
| D202 | 8-719-987-63 | DIODE 1N4148M | | R118 | 1-247-717-11 | CARBON 2.2K 5% | 1/4W F |
| D203 | 8-719-987-63 | DIODE 1N4148M | | R119 | 1-249-579-91 | CARBON 13K 5% | 1/4W |
| D204 | 8-719-987-63 | DIODE 1N4148M | | R120 | 1-249-920-11 | CARBON 750 1% | 1/4W |
| D304 | 8-719-987-63 | DIODE 1N4148M | | R121 | 1-246-545-00 | CARBON 1.0M 5% | 1/4W |
| D308 | 8-719-987-63 | DIODE 1N4148M | | R122 | 1-249-469-11 | CARBON 100K 5% | 1/4W |
| D309 | 8-719-987-63 | DIODE 1N4148M | | R125 | 1-247-721-11 | CARBON 4.7K 5% | 1/4W |
| D310 | 8-719-987-63 | DIODE 1N4148M | | R126 | 1-247-721-11 | CARBON 4.7K 5% | 1/4W |
| D311 | 8-719-902-87 | DIODE EQB01-08Q | | R130 | 1-249-520-11 | CARBON 47 5% | 1/4W |
| D312 | 8-719-902-87 | DIODE EQB01-08Q | | R131 | 1-249-520-11 | CARBON 47 5% | 1/4W |
| < IC > | | | | R217 | 1-246-545-00 | CARBON 1.0M 5% | 1/4W |
| IC102 | 8-759-602-83 | IC M5238P | | R218 | 1-247-717-11 | CARBON 2.2K 5% | 1/4W F |
| IC103 | 8-759-504-50 | IC LF412CN/SL161841 | | R219 | 1-249-579-91 | CARBON 13K 5% | 1/4W |
| IC202 | 8-759-602-83 | IC M5238P | | R220 | 1-249-920-11 | CARBON 750 1% | 1/4W |
| IC203 | 8-759-504-50 | IC LF412CN/SL161841 | | R221 | 1-246-545-00 | CARBON 1.0M 5% | 1/4W |
| IC301 | 8-759-196-20 | IC CXD8493P | | R222 | 1-249-469-11 | CARBON 100K 5% | 1/4W |
| IC304 | 8-759-925-72 | IC SN74HC02ANS | | R225 | 1-247-721-11 | CARBON 4.7K 5% | 1/4W |
| IC305 | 8-759-927-29 | IC SN74HCU04ANS | | R226 | 1-247-721-11 | CARBON 4.7K 5% | 1/4W |
| IC306 | 8-759-925-78 | IC SN74HC10ANS | | R230 | 1-249-520-11 | CARBON 47 5% | 1/4W |
| IC307 | 8-759-925-90 | IC SN74HC74ANS | | R231 | 1-249-520-11 | CARBON 47 5% | 1/4W |
| IC308 | 8-759-239-64 | IC TC74HC590AF | | R316 | 1-259-428-11 | CARBON 1K 5% | 1/6W |
| IC309 | 8-759-196-21 | IC CXD8482Q | | R317 | 1-259-500-11 | CARBON 1M 5% | 1/6W |
| IC330 | 8-759-231-53 | IC TA7805S | | R318 | 1-259-428-11 | CARBON 1K 5% | 1/6W |
| IC331 | 8-759-245-79 | IC TA79005S | | R319 | 1-259-500-11 | CARBON 1M 5% | 1/6W |
| IC332 | 8-759-231-53 | IC TA7805S | | R320 | 1-259-428-11 | CARBON 1K 5% | 1/6W |
| < COIL > | | | | R321 | 1-259-500-11 | CARBON 1M 5% | 1/6W |
| L301 | 1-408-117-00 | INDUCTOR 10uH | | R322 | 1-259-396-11 | CARBON 47 5% | 1/6W |
| L302 | 1-408-117-00 | INDUCTOR 10uH | | R323 | 1-259-404-11 | CARBON 100 5% | 1/6W (AEP, G) |
| < IC LINK > | | | | R323 | 1-424-033-11 | FILTER, NOISE (US) | |
| △PS301 | 1-532-637-00 | LINK, IC ICP-N25 (1.0A) | | R324 | 1-259-404-11 | CARBON 100 5% | 1/6W |
| △PS302 | 1-532-637-00 | LINK, IC ICP-N25 (1.0A) | | R325 | 1-259-404-11 | CARBON 100 5% | 1/6W |
| < TRANSISTOR > | | | | R326 | 1-259-404-11 | CARBON 100 5% | 1/6W |
| Q310 | 8-729-224-63 | TRANSISTOR 2SK246-BL | | R327 | 1-259-404-11 | CARBON 100 5% | 1/6W |
| Q311 | 8-729-224-63 | TRANSISTOR 2SK246-BL | | R328 | 1-259-404-11 | CARBON 100 5% | 1/6W |
| Q312 | 8-729-803-82 | TRANSISTOR 2SC3468-E | | R332 | 1-247-704-11 | CARBON 220 5% | 1/4W |
| Q313 | 8-729-803-76 | TRANSISTOR 2SA1371-E | | R333 | 1-247-704-11 | CARBON 220 5% | 1/4W |
| Q314 | 8-729-127-53 | TRANSISTOR 2SC2275-P | | R334 | 1-249-466-11 | CARBON 56K 5% | 1/4W |
| Q315 | 8-729-141-10 | TRANSISTOR 2SA985A-QP | | R335 | 1-249-466-11 | CARBON 56K 5% | 1/4W |
| Q316 | 8-729-803-76 | TRANSISTOR 2SA1371-E | | R336 | 1-247-719-11 | CARBON 3.3K 5% | 1/4W |
| Q317 | 8-729-803-82 | TRANSISTOR 2SC3468-E | | R337 | 1-247-719-11 | CARBON 3.3K 5% | 1/4W |
| Q318 | 8-729-803-82 | TRANSISTOR 2SC3468-E | | R338 | 1-249-798-11 | CARBON 680 5% | 1/2W |
| Q319 | 8-729-803-76 | TRANSISTOR 2SA1371-E | | R339 | 1-249-798-11 | CARBON 680 5% | 1/2W |
| Q335 | 8-729-900-61 | TRANSISTOR DTA114ES | | R340 | 1-247-751-11 | CARBON 820 5% | 1/2W |
| Q336 | 8-729-900-80 | TRANSISTOR DTC114ES | | R341 | 1-247-751-11 | CARBON 820 5% | 1/2W |
| < RESISTOR > | | | | R344 | 1-259-416-11 | CARBON 330 5% | 1/6W |
| R117 | 1-246-545-00 | CARBON 1.0M 5% | 1/4W | R345 | 1-259-396-11 | CARBON 47 5% | 1/6W |
| | | | | R346 | 1-259-428-11 | CARBON 1K 5% | 1/6W |
| | | | | R347 | 1-259-420-11 | CARBON 470 5% | 1/6W |
| | | | | R348 | 1-259-420-11 | CARBON 470 5% | 1/6W |
| | | | | R378 | 1-259-426-11 | CARBON 820 5% | 1/6W |
| | | | | R392 | 1-259-404-11 | CARBON 100 5% | 1/6W (AEP, G) |

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

AD BATTERY CAS IN CASSE-COM MOTOR

CASSE-COM SW D I/O

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|---------------|--------------|---|--------|
| R392 | 1-424-033-11 | FILTER, NOISE (US) < RELAY > | | * | 1-641-487-11 | CASSE-COM SW BOARD ***** < SWITCH > | |
| RY302 | 1-515-804-11 | RELAY < VIBRATOR > | | S1 | 1-571-958-11 | SWITCH, PUSH (1 KEY) (CASSETTE TABLE OUT) | |
| X301 | 1-567-814-11 | VIBRATOR, CRYSTAL (24.576MHz) | | S2 | 1-571-958-11 | SWITCH, PUSH (1 KEY) (CASSETTE TABLE IN) | |
| X302 | 1-567-815-11 | VIBRATOR, CRYSTAL (22.5792MHz) | | ***** | | | |
| X303 | 1-760-146-11 | VIBRATOR, CRYSTAL (16.384MHz) | | * | A-2007-091-A | D I/O BOARD, COMPLETE ***** < CAPACITOR > | |
| ***** | | | | C501 | 1-130-483-00 | MYLAR 0.01uF 5% 50V | |
| * | 1-650-800-11 | BATTERY BOARD ***** < BATTERY > | | C502 | 1-130-483-00 | MYLAR 0.01uF 5% 50V | |
| BT601 | 1-528-229-11 | BATTERY, LITHIUM (CR-2450) < CONNECTOR > | | C503 | 1-130-483-00 | MYLAR 0.01uF 5% 50V | |
| * CN606 | 1-564-496-11 | PIN, CONNECTOR 3P | | C504 | 1-130-483-00 | MYLAR 0.01uF 5% 50V | |
| * CN608 | 1-564-720-11 | PIN, CONNECTOR (SMALL TYPE) 4P < RESISTOR > | | C505 | 1-162-279-31 | CERAMIC 75PF 10% 50V | |
| R645 | 1-249-429-11 | CARBON 10K 5% 1/4W | | C507 | 1-162-211-31 | CERAMIC 33PF 5% 50V | |
| ***** | | | | C508 | 1-130-483-00 | MYLAR 0.01uF 5% 50V | |
| * | 1-650-814-11 | CAS IN BOARD ***** < SWITCH > | | C509 | 1-124-907-11 | ELECT 10uF 20% 50V | |
| S901 | 1-572-459-11 | SWITCH, PUSH (REC PROOF/CASSETTE IN) | | C510 | 1-130-483-00 | MYLAR 0.01uF 5% 50V | |
| ***** | | | | C511 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| * | 1-641-486-11 | CASSE-COM MOTOR BOARD ***** < CAPACITOR > | | C550 | 1-126-924-11 | ELECT 330uF 20% 6.3V | |
| C1 | 1-162-851-11 | CERAMIC 0.1MF 16V < CONNECTOR > | | C551 | 1-126-924-11 | ELECT 330uF 20% 6.3V | |
| * CN1 | 1-564-498-11 | PIN, CONNECTOR 5P | | C552 | 1-126-924-11 | ELECT 330uF 20% 6.3V | |
| * CN2 | 1-564-337-00 | PIN, CONNECTOR 3P | | C553 | 1-126-924-11 | ELECT 330uF 20% 6.3V | |
| ***** | | | | C554 | 1-126-924-11 | ELECT 330uF 20% 6.3V | |
| | | | | C555 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C556 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C557 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C558 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C559 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C560 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C561 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C562 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C563 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C564 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C566 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | C567 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| | | | | < CONNECTOR > | | | |
| | | | | * CN501 | 1-564-712-11 | PIN, CONNECTOR (SMALL TYPE) 10P | |
| | | | | * CN502 | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P | |
| | | | | * CN503 | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P | |
| | | | | < IC > | | | |
| | | | | IC501 | 8-759-242-84 | IC TORX176 | |
| | | | | IC502 | 8-759-242-84 | IC TORX176 | |
| | | | | IC503 | 8-759-242-85 | IC TOTX176 | |
| | | | | IC504 | 8-759-916-12 | IC SN74HC00AN | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-----------------------------|--------|----------|--------------|--------------------------------------|--------|
| IC505 | 8-759-916-12 | IC SN74HC00AN | | * | A-2007-241-A | DA BOARD, COMPLETE (AEP, G) ***** | |
| IC506 | 8-759-916-12 | IC SN74HC00AN | | * | A-2007-245-A | DA BOARD, COMPLETE (US) ***** | |
| IC507 | 8-759-916-18 | IC SN74HC10AN | | | | | |
| IC508 | 8-759-916-12 | IC SN74HC00AN | | | | | |
| IC509 | 8-759-135-80 | IC UPC358C | | | | | |
| IC510 | 8-759-917-18 | IC SN74HCU04AN | | | | < BUS BAR > | |
| IC511 | 8-759-032-81 | IC MC74HC74AN | | * BB04 | 1-691-275-11 | BUS BAR | |
| | | < JACK > | | BB05 | 1-566-940-21 | BUS BAR 3P | |
| J501 | 1-764-414-11 | JACK, PIN (DIGITAL IN) | | BB06 | 1-566-940-21 | BUS BAR 3P | |
| J502 | 1-764-413-11 | JACK, PIN (DIGITAL OUT) | | BB07 | 1-566-940-21 | BUS BAR 3P | |
| | | < COIL > | | BB08 | 1-566-940-21 | BUS BAR 3P | |
| L501 | 1-408-068-00 | INDUCTOR 33uH | | | | < CAPACITOR > | |
| L502 | 1-408-068-00 | INDUCTOR 33uH | | C112 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| L503 | 1-408-068-00 | INDUCTOR 33uH | | C113 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| L504 | 1-236-129-11 | ENCAPSULATED COMPONENT | | C114 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| L505 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1uH | | C115 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| L506 | 1-236-129-11 | ENCAPSULATED COMPONENT | | C116 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| L507 | 1-236-129-11 | ENCAPSULATED COMPONENT | | C117 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| L508 | 1-408-068-00 | INDUCTOR 33uH | | C118 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| | | < PLATE, GROUND > | | C119 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| * P501 | 4-942-204-01 | PLATE, GROUND | | C120 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| | | < RESISTOR > | | C121 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| R501 | 1-249-437-11 | CARBON 47K 5% 1/4W | | C122 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| R502 | 1-249-437-11 | CARBON 47K 5% 1/4W | | C123 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| R503 | 1-249-437-11 | CARBON 47K 5% 1/4W | | C124 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| R504 | 1-247-804-11 | CARBON 75 5% 1/4W | | C125 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| R505 | 1-249-409-11 | CARBON 220 5% 1/4W F | | C126 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| R506 | 1-247-804-11 | CARBON 75 5% 1/4W | | C127 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| R507 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | | C128 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| R508 | 1-249-417-11 | CARBON 1K 5% 1/4W F | | C129 | 1-136-810-11 | FILM 220PF 5% 100V | |
| R509 | 1-249-417-11 | CARBON 1K 5% 1/4W F | | C130 | 1-136-810-11 | FILM 220PF 5% 100V | |
| R510 | 1-249-429-11 | CARBON 10K 5% 1/4W | | C131 | 1-136-810-11 | FILM 220PF 5% 100V | |
| R511 | 1-249-421-11 | CARBON 2.2K 5% 1/4W F | | C132 | 1-136-810-11 | FILM 220PF 5% 100V | |
| R512 | 1-249-421-11 | CARBON 2.2K 5% 1/4W F | | C133 | 1-136-811-11 | FILM 330PF 5% 100V | |
| R513 | 1-249-435-11 | CARBON 33K 5% 1/4W | | C134 | 1-136-811-11 | FILM 330PF 5% 100V | |
| R514 | 1-249-429-11 | CARBON 10K 5% 1/4W | | C135 | 1-136-253-11 | FILM 0.0018uF 5% 100V | |
| R515 | 1-249-429-11 | CARBON 10K 5% 1/4W | | C136 | 1-136-253-11 | FILM 0.0018uF 5% 100V | |
| R698 | 1-247-739-11 | CARBON 100 5% 1/2W | | C137 | 1-136-253-11 | FILM 0.0018uF 5% 100V | |
| R699 | 1-247-739-11 | CARBON 100 5% 1/2W | | C138 | 1-136-177-00 | FILM 1uF 5% 50V | |
| | | < TRANSFORMER > | | C140 | 1-107-202-00 | MICA 10PF 5% 500V | |
| T501 | 1-459-795-11 | COIL (WITH CORE) | | C180 | 9-910-999-1B | FILM 0.02MF 3% 100V | |
| ***** | | | | C212 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| | | | | C213 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| | | | | C214 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| | | | | C215 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| | | | | C216 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| | | | | C217 | 1-124-122-11 | ELECT 100uF 20% 50V | |
| | | | | C218 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| | | | | C219 | 1-136-165-00 | FILM 0.1uF 5% 50V | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------|------------------|----------|--------------|--------------------------------|--------|
| C220 | 1-124-122-11 | ELECT | 100uF 20% 50V | C390 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C221 | 1-136-165-00 | FILM | 0.1uF 5% 50V | C397 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C222 | 1-136-165-00 | FILM | 0.1uF 5% 50V | C398 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C223 | 1-136-165-00 | FILM | 0.1uF 5% 50V | C399 | 1-161-379-00 | CERAMIC 0.01uF 20% 25V | |
| C224 | 1-124-122-11 | ELECT | 100uF 20% 50V | | | < CONNECTOR > | |
| C225 | 1-136-165-00 | FILM | 0.1uF 5% 50V | CN311 | 1-764-589-11 | SOCKET, CONNECTOR 23P | |
| C226 | 1-124-122-11 | ELECT | 100uF 20% 50V | * CN313 | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P | |
| C227 | 1-136-165-00 | FILM | 0.1uF 5% 50V | CN314 | 1-691-461-11 | PIN, CONNECTOR (PC BOARD) 5P | |
| C228 | 1-136-165-00 | FILM | 0.1uF 5% 50V | CN316 | 1-691-766-11 | PLUG (MICRO CONNECTOR) 4P | |
| C229 | 1-136-810-11 | FILM | 220PF 5% 100V | CN317 | 1-691-766-31 | PLUG (MICRO CONNECTOR) 4P | |
| C230 | 1-136-810-11 | FILM | 220PF 5% 100V | CN350 | 1-564-506-11 | PLUG, CONNECTOR 3P | |
| C231 | 1-136-810-11 | FILM | 220PF 5% 100V | | | < DIODE > | |
| C232 | 1-136-810-11 | FILM | 220PF 5% 100V | D150 | 8-719-987-63 | DIODE 1N4148M | |
| C233 | 1-136-811-11 | FILM | 330PF 5% 100V | D250 | 8-719-987-63 | DIODE 1N4148M | |
| C234 | 1-136-811-11 | FILM | 330PF 5% 100V | D313 | 8-719-114-27 | DIODE RD4. 7JSB3 | |
| C235 | 1-136-253-11 | FILM | 0.0018uF 5% 100V | D314 | 8-719-987-63 | DIODE 1N4148M | |
| C236 | 1-136-253-11 | FILM | 0.0018uF 5% 100V | D315 | 8-719-936-68 | DIODE KV1260 | |
| C237 | 1-136-253-11 | FILM | 0.0018uF 5% 100V | D316 | 8-719-114-30 | DIODE RD5. 1JSB2 | |
| C238 | 1-136-177-00 | FILM | 1uF 5% 50V | D317 | 8-719-987-63 | DIODE 1N4148M | |
| C240 | 1-107-202-00 | MICA | 10PF 5% 500V | D350 | 8-719-987-63 | DIODE 1N4148M | |
| C280 | 9-910-999-1B | FILM | 0.02MF 3% 100V | D390 | 8-719-987-63 | DIODE 1N4148M | |
| C346 | 1-124-122-11 | ELECT | 100uF 20% 50V | | | < IC > | |
| C347 | 1-136-165-00 | FILM | 0.1uF 5% 50V | IC104 | 8-759-044-10 | IC CXD2562Q | |
| C348 | 1-124-910-11 | ELECT | 47uF 20% 50V | IC105 | 8-759-900-72 | IC NE5532P | |
| C349 | 1-136-165-00 | FILM | 0.1uF 5% 50V | IC106 | 8-759-900-72 | IC NE5532P | |
| C350 | 1-124-122-11 | ELECT | 100uF 20% 50V | IC107 | 8-759-900-72 | IC NE5532P | |
| C351 | 1-136-165-00 | FILM | 0.1uF 5% 50V | IC108 | 8-759-900-72 | IC NE5532P | |
| C352 | 1-136-165-00 | FILM | 0.1uF 5% 50V | IC204 | 8-759-044-10 | IC CXD2562Q | |
| C353 | 1-136-165-00 | FILM | 0.1uF 5% 50V | IC205 | 8-759-900-72 | IC NE5532P | |
| C354 | 1-124-122-11 | ELECT | 100uF 20% 50V | IC206 | 8-759-900-72 | IC NE5532P | |
| C355 | 1-136-157-00 | FILM | 0.022uF 5% 50V | IC207 | 8-759-900-72 | IC NE5532P | |
| C356 | 1-136-173-00 | FILM | 0.47uF 5% 50V | IC208 | 8-759-900-72 | IC NE5532P | |
| C357 | 1-136-153-00 | FILM | 0.01uF 5% 50V | IC310 | 8-752-356-03 | IC CXD2567M-T6 | |
| C358 | 1-107-037-00 | MICA | 82PF 5% 500V | IC311 | 8-759-917-18 | IC SN74HCU04AN | |
| C359 | 1-107-202-00 | MICA | 10PF 5% 500V | IC312 | 8-759-925-90 | IC SN74HC74ANS | |
| C360 | 1-124-122-11 | ELECT | 100uF 20% 50V | IC313 | 8-759-926-23 | IC SN74HC163ANS | |
| C361 | 1-107-159-00 | MICA | 33PF 5% 500V | IC314 | 8-752-306-51 | IC CX23065A | |
| C362 | 1-107-202-00 | MICA | 10PF 5% 500V | IC315 | 8-759-927-29 | IC SN74HCU04ANS | |
| C363 | 1-136-157-00 | FILM | 0.022uF 5% 50V | IC316 | 8-759-900-72 | IC NE5532P | |
| C364 | 1-124-122-11 | ELECT | 100uF 20% 50V | IC320 | 8-759-241-15 | IC TC74HC242AF-TP2 | |
| C365 | 1-136-157-00 | FILM | 0.022uF 5% 50V | IC399 | 8-759-520-90 | IC PST572E | |
| C366 | 1-136-157-00 | FILM | 0.022uF 5% 50V | | | < COIL > | |
| C367 | 1-126-365-51 | ELECT | 100uF 20% 63V | L303 | 1-426-850-11 | COIL (RF) | |
| C368 | 1-126-365-51 | ELECT | 100uF 20% 63V | L304 | 1-408-117-00 | INDUCTOR 10uH | |
| C369 | 1-124-122-11 | ELECT | 100uF 20% 50V | L310 | 1-408-117-00 | INDUCTOR 10uH | |
| C370 | 1-136-165-00 | FILM | 0.1uF 5% 50V | | | | |
| C371 | 1-107-822-51 | ELECT | 1000uF 20% 42V | | | | |
| C380 | 1-136-153-00 | FILM | 0.01uF 5% 50V | | | | |
| C381 | 1-136-165-00 | FILM | 0.1uF 5% 50V | | | | |
| C389 | 1-136-165-00 | FILM | 0.1uF 5% 50V | | | | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------------|--------------|-----------------------|--------|----------|--------------|----------------------------------|----------------|
| < TRANSISTOR > | | | | | | | |
| Q107 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | | R144 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| Q108 | 8-729-184-52 | TRANSISTOR 2SC1845-FA | | R145 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| Q109 | 8-729-184-52 | TRANSISTOR 2SC1845-FA | | R146 | 1-249-945-11 | CARBON 8.2K 1% | 1/4W |
| Q110 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | | | | | |
| Q111 | 8-729-321-35 | TRANSISTOR 2SK213 | | R147 | 1-247-721-11 | CARBON 4.7K 5% | 1/4W |
| Q112 | 8-729-307-65 | TRANSISTOR 2SJ76 | | R148 | 1-249-945-11 | CARBON 8.2K 1% | 1/4W |
| Q113 | 8-729-107-85 | TRANSISTOR 2SC3623A-K | | R149 | 1-247-721-11 | CARBON 4.7K 5% | 1/4W |
| Q114 | 8-729-900-61 | TRANSISTOR DTA114ES | | R150 | 1-249-929-11 | CARBON 1.8K 1% | 1/4W |
| Q150 | 8-729-900-80 | TRANSISTOR DTC114ES | | R151 | 1-249-929-11 | CARBON 1.8K 1% | 1/4W |
| Q151 | 8-729-900-61 | TRANSISTOR DTA114ES | | R152 | 1-249-929-11 | CARBON 1.8K 1% | 1/4W |
| Q207 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | | R153 | 1-249-929-11 | CARBON 1.8K 1% | 1/4W |
| Q208 | 8-729-184-52 | TRANSISTOR 2SC1845-FA | | R154 | 1-249-606-11 | CARBON 180K 5% | 1/4W |
| Q209 | 8-729-184-52 | TRANSISTOR 2SC1845-FA | | R155 | 1-247-713-11 | CARBON 1K 5% | 1/4W F |
| Q210 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | | R156 | 1-249-553-11 | CARBON 1.1K 5% | 1/4W |
| Q211 | 8-729-321-35 | TRANSISTOR 2SK213 | | | | | |
| Q212 | 8-729-307-65 | TRANSISTOR 2SJ76 | | R157 | 1-249-465-11 | CARBON 47K 5% | 1/4W |
| Q213 | 8-729-107-85 | TRANSISTOR 2SC3623A-K | | R158 | 1-247-704-11 | CARBON 220 5% | 1/4W |
| Q214 | 8-729-900-61 | TRANSISTOR DTA114ES | | R159 | 1-249-577-11 | CARBON 11K 5% | 1/4W |
| Q250 | 8-729-900-80 | TRANSISTOR DTC114ES | | R160 | 1-247-148-00 | CARBON 5.1K 5% | 1/4W |
| Q251 | 8-729-900-61 | TRANSISTOR DTA114ES | | R161 | 1-249-577-11 | CARBON 11K 5% | 1/4W |
| Q320 | 8-729-900-80 | TRANSISTOR DTC114ES | | R162 | 1-247-148-00 | CARBON 5.1K 5% | 1/4W |
| Q321 | 8-729-900-61 | TRANSISTOR DTA114ES | | R163 | 1-247-704-11 | CARBON 220 5% | 1/4W |
| Q322 | 8-729-900-80 | TRANSISTOR DTC114ES | | R164 | 1-247-739-11 | CARBON 100 5% | 1/2W |
| Q323 | 8-729-900-61 | TRANSISTOR DTA114ES | | R165 | 1-249-637-11 | CARBON 33 5% | 1/2W |
| Q325 | 8-729-127-53 | TRANSISTOR 2SC2275-P | | R166 | 1-249-637-11 | CARBON 33 5% | 1/2W |
| Q326 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | | R167 | 1-247-739-11 | CARBON 100 5% | 1/2W |
| Q327 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | | R168 | 1-249-465-11 | CARBON 47K 5% | 1/4W |
| Q328 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | | R169 | 1-247-739-11 | CARBON 100 5% | 1/2W |
| Q329 | 8-729-200-56 | TRANSISTOR 2SK241-GR | | R170 | 1-259-452-11 | CARBON 10K 5% | 1/6W |
| Q330 | 8-729-200-56 | TRANSISTOR 2SK241-GR | | R171 | 1-259-468-11 | CARBON 47K 5% | 1/6W |
| Q331 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | | R172 | 1-259-476-11 | CARBON 100K 5% | 1/6W |
| Q332 | 8-729-127-53 | TRANSISTOR 2SC2275-P | | R178 | 1-247-700-11 | CARBON 100 5% | 1/4W F(AEP, G) |
| Q333 | 8-729-900-61 | TRANSISTOR DTA114ES | | R178 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1uH (US) | |
| Q334 | 8-729-900-80 | TRANSISTOR DTC114ES | | R180 | 1-259-426-11 | CARBON 820 5% | 1/6W |
| Q399 | 8-729-900-80 | TRANSISTOR DTC114ES | | R181 | 1-249-920-11 | CARBON 750 1% | 1/4W |
| < RESISTOR > | | | | | | | |
| R132 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R182 | 1-246-545-00 | CARBON 1.0M 5% | 1/4W |
| R133 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R190 | 1-247-739-11 | CARBON 100 5% | 1/2W |
| R134 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R232 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R135 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R233 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R136 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R234 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R137 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R235 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R138 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R236 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R139 | 1-249-947-11 | CARBON 10K 1% | 1/4W | R237 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R140 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W | R238 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R141 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W | R239 | 1-249-947-11 | CARBON 10K 1% | 1/4W |
| R142 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W | R240 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| R143 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W | R241 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| | | | | R242 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| | | | | R243 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| | | | | R244 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| | | | | R245 | 1-249-944-11 | CARBON 7.5K 1% | 1/4W |
| | | | | R246 | 1-249-945-11 | CARBON 8.2K 1% | 1/4W |

HP LED LOAD SW LOADING MOTOR MAIN

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|---------------|----------|--------------|--------------------------------|--------------------|
| | | < IC > | | | | < CONNECTOR > | |
| IC317 | 8-759-745-61 | IC NJM4560D-D | | * CN919 | 1-564-496-11 | PIN, CONNECTOR 3P | |
| | | < JACK > | | * CN920 | 1-564-497-11 | PIN, CONNECTOR 4P | |
| J302 | 1-565-327-11 | JACK, LARGE TYPE 1P (PHONES) | | * CN922 | 1-564-495-11 | PIN, CONNECTOR 2P | |
| | | < RESISTOR > | | | | < MOTOR > | |
| R174 | 1-249-497-11 | CARBON | 33K 5% 1/4W | M901 | A-2004-301-A | MOTOR ASSY, CONTROL (LOADING) | |
| R175 | 1-247-721-11 | CARBON | 4.7K 5% 1/4W | ***** | | | |
| R176 | 1-249-462-11 | CARBON | 22K 5% 1/4W | * | A-2007-092-A | MAIN BOARD, COMPLETE (US, AEP) | |
| R177 | 1-247-700-11 | CARBON | 100 5% 1/4W F | ***** | | | |
| R274 | 1-249-497-11 | CARBON | 33K 5% 1/4W | * | A-2007-184-A | MAIN BOARD, COMPLETE (G) | |
| R275 | 1-247-721-11 | CARBON | 4.7K 5% 1/4W | ***** | | | |
| R276 | 1-249-462-11 | CARBON | 22K 5% 1/4W | | | < CAPACITOR > | |
| R277 | 1-247-700-11 | CARBON | 100 5% 1/4W F | C401 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| △R376 | 1-212-857-00 | FUSIBLE | 10 5% 1/4W F | C402 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| △R377 | 1-212-857-00 | FUSIBLE | 10 5% 1/4W F | C403 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| | | < VARIABLE RESISTOR > | | C404 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| RV302 | 1-223-557-11 | RES, VAR, CARBON 20K/20K (PHONE LEVEL) | | C405 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| ***** | | | | C406 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| * | 1-650-798-11 | LED BOARD | | C407 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V (US, AEP) |
| | | ***** | | C408 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V (US, AEP) |
| | | < DIODE > | | C409 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V (US, AEP) |
| D660 | 8-719-421-98 | DIODE LN01401C(Q)-3-LF | | C410 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| D661 | 8-719-421-98 | DIODE LN01401C(Q)-3-LF | | C411 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| D662 | 8-719-421-98 | DIODE LN01401C(Q)-3-LF | | C412 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| | | < RESISTOR > | | C413 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| R662 | 1-249-408-11 | CARBON | 180 5% 1/4W F | C414 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| R690 | 1-247-806-11 | CARBON | 91 5% 1/4W | C415 | 1-164-505-11 | CERAMIC CHIP 2.2uF | 16V (US, AEP) |
| ***** | | | | C415 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V (G) |
| * | 1-650-811-11 | LOAD SW BOARD | | C416 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| | | ***** | | C417 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| | | < SWITCH > | | C418 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| S902 | 1-571-489-11 | SWITCH, SLIDE (UNLOAD) | | C420 | 1-126-206-11 | ELECT CHIP 100uF | 20% 6.3V |
| S903 | 1-571-489-11 | SWITCH, SLIDE (LOAD) | | C421 | 1-126-206-11 | ELECT CHIP 100uF | 20% 6.3V |
| ***** | | | | C422 | 1-126-206-11 | ELECT CHIP 100uF | 20% 6.3V (US, AEP) |
| * | 1-650-813-11 | LOADING MOTOR BOARD | | C423 | 1-126-206-11 | ELECT CHIP 100uF | 20% 6.3V |
| | | ***** | | C424 | 1-126-206-11 | ELECT CHIP 100uF | 20% 6.3V |
| | | < CAPACITOR > | | C425 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C999 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V | C428 | 1-163-087-00 | CERAMIC CHIP 4PF | 50V |
| | | | | C429 | 1-163-087-00 | CERAMIC CHIP 4PF | 50V |
| | | | | C430 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| | | | | C431 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |
| | | | | C432 | 1-163-009-11 | CERAMIC CHIP 0.001uF | 10% 50V |
| | | | | C433 | 1-163-121-00 | CERAMIC CHIP 150PF | 5% 50V |
| | | | | C434 | 1-163-009-11 | CERAMIC CHIP 0.001uF | 10% 50V |
| | | | | C435 | 1-163-009-11 | CERAMIC CHIP 0.001uF | 10% 50V (US, AEP) |
| | | | | C436 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |

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

MAIN

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------------|----------|----------|--------------|-----------------------------------|--------|
| C437 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V | | | < IC > | |
| C438 | 1-163-809-11 | CERAMIC CHIP 0.047uF | 10% 25V | IC401 | 8-752-355-55 | IC CXD2605Q | |
| C440 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V | IC402 | 8-752-355-55 | IC CXD2605Q (US, AEP) | |
| C442 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V | IC403 | 8-752-853-30 | IC CXP87532-007Q | |
| C444 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V | IC404 | 8-759-194-56 | IC CXD8484Q | |
| C446 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V | IC405 | 8-752-343-18 | IC CXD2704Q | |
| C447 | 1-126-206-11 | ELECT CHIP 100uF | 20% 6.3V | IC406 | 8-752-356-96 | IC CXK58257AM-10LL | |
| | | < CONNECTOR > | | IC407 | 8-752-356-96 | IC CXK58257AM-10LL (US, AEP) | |
| CN401 | 1-764-080-21 | PIN, CONNECTOR (PC BOARD) | 8P | IC408 | 8-759-926-48 | IC SN74HC244ANS | |
| CN402 | 1-695-889-21 | PIN, CONNECTOR (PC BOARD) | 10P | IC409 | 8-759-926-48 | IC SN74HC244ANS | |
| CN404 | 1-764-079-21 | PIN, CONNECTOR (PC BOARD) | 4P | IC410 | 8-759-925-72 | IC SN74HC02ANS | |
| CN406 | 1-569-480-11 | CONNECTOR, FPC | 23P | IC411 | 8-759-925-72 | IC SN74HC02ANS | |
| CN407 | 1-764-087-21 | PIN, CONNECTOR (PC BOARD) | 14P | IC412 | 8-759-242-72 | IC TC7W00F | |
| CN408 | 1-695-209-21 | PIN, CONNECTOR (PC BOARD) | 15P | IC413 | 8-759-634-43 | IC M51953BFP | |
| CN409 | 1-565-728-11 | CONNECTOR, FPC | 17P | IC415 | 8-759-243-19 | IC TC7SU04F | |
| | | < DIODE > | | IC416 | 8-759-926-45 | IC SN74HC241ANS | |
| D401 | 8-719-033-11 | DIODE KV1550TL00 | | IC417 | 8-759-243-19 | IC TC7SU04F (US, AEP) | |
| | | < COIL > | | IC418 | 8-759-243-19 | IC TC7SU04F | |
| F403 | 1-414-135-11 | INDUCTOR CHIP 0UH | | | | < COIL > | |
| F404 | 1-414-135-11 | INDUCTOR CHIP 0UH | | L403 | 1-410-370-31 | INDUCTOR CHIP 1.2uH | |
| F417 | 1-414-135-11 | INDUCTOR CHIP 0UH | | L404 | 1-410-381-11 | INDUCTOR CHIP 10uH | |
| F418 | 1-414-135-11 | INDUCTOR CHIP 0UH | | L405 | 1-410-381-11 | INDUCTOR CHIP 10uH (US, AEP) | |
| F419 | 1-414-135-11 | INDUCTOR CHIP 0UH | | L406 | 1-410-387-11 | INDUCTOR CHIP 33uH | |
| F423 | 1-414-135-11 | INDUCTOR CHIP 0UH | | | | < RESISTOR > | |
| F424 | 1-414-135-11 | INDUCTOR CHIP 0UH | | R401 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F425 | 1-414-135-11 | INDUCTOR CHIP 0UH | | R402 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| | | < RESISTOR > | | R403 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F402 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | | R404 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F410 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R405 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | |
| F411 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R406 | 1-216-025-00 | METAL CHIP 100 5% 1/10W (US, AEP) | |
| F412 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R407 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F413 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R409 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| F414 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R410 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| F415 | 1-216-295-00 | METAL CHIP 0 5% 1/10W (US, AEP) | | R411 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| F416 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R415 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| F420 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | | R417 | 1-216-025-00 | METAL CHIP 100 5% 1/10W (US, AEP) | |
| F421 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R418 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |
| F422 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | | R419 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F426 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R420 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F427 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R424 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| F428 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R425 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| F430 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | | R426 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| F431 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R427 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | |
| F432 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | | R428 | 1-216-295-00 | METAL CHIP 0 5% 1/10W (US, AEP) | |
| | | | | R430 | 1-216-295-00 | METAL CHIP 0 5% 1/10W (G) | |
| | | | | R431 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| | | | | R432 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |
| | | | | R433 | 1-216-097-00 | METAL CHIP 100K 5% 1/10W | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------------|------------------------|----------|--------------|--------------------------------|-------------------|
| R434 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C911 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V |
| R435 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C912 | 1-163-986-00 | CERAMIC CHIP | 0.027uF 10% 25V |
| R436 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C913 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF 10% 50V |
| R437 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C914 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V |
| R438 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C915 | 1-163-986-00 | CERAMIC CHIP | 0.027uF 10% 25V |
| R440 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C916 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF 10% 50V |
| R441 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C917 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R442 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C918 | 1-126-395-11 | ELECT | 22uF 20% 16V |
| R445 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C919 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V |
| R446 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W (US, AEP) | C920 | 1-126-601-11 | ELECT CHIP | 2.2uF 20% 50V |
| R447 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C921 | 1-126-205-11 | ELECT CHIP | 47uF 20% 6.3V |
| R448 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C923 | 1-126-395-11 | ELECT | 22uF 20% 16V |
| R449 | 1-216-057-00 | METAL CHIP | 2.2K 5% 1/10W | C930 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| R450 | 1-216-065-00 | METAL CHIP | 4.7K 5% 1/10W | C931 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| R452 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C932 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| R453 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W (US, AEP) | C934 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R454 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W | C935 | 1-126-916-11 | ELECT | 1000uF 20% 6.3V |
| R455 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C936 | 1-163-989-11 | CERAMIC CHIP | 0.033uF 10% 25V |
| R457 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W (G) | C938 | 1-163-091-00 | CERAMIC CHIP | 8PF 50V |
| R458 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W (G) | C939 | 1-163-091-00 | CERAMIC CHIP | 8PF 50V |
| R459 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W (G) | C940 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R460 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W (G) | C941 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R461 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W (G) | C942 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R465 | 1-216-295-00 | METAL CHIP | 0 5% 1/10W | C944 | 1-126-204-11 | ELECT CHIP | 47uF 20% 16V |
| R471 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C946 | 1-163-009-11 | CERAMIC CHIP | 0.001uF 10% 50V |
| R472 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C947 | 1-126-206-11 | ELECT CHIP | 100uF 20% 6.3V |
| R475 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C948 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R478 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C949 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| R479 | 1-216-097-00 | METAL CHIP | 100K 5% 1/10W | C950 | 1-163-038-00 | CERAMIC CHIP | 0.1uF 25V |
| | | < VIBRATOR > | | C951 | 1-163-133-00 | CERAMIC CHIP | 470PF 5% 50V |
| X401 | 1-579-499-11 | OSCILLATOR, CRYSTAL (49.152MHz) | | C952 | 1-163-133-00 | CERAMIC CHIP | 470PF 5% 50V |
| X402 | 1-760-164-11 | VIBRATOR, CRYSTAL (37.632MHz) | | C953 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| | | | | C954 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| | | | | C955 | 1-163-001-11 | CERAMIC CHIP | 220PF 10% 50V |
| | | | | C956 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| ***** | | | | | | | |
| * | A-2007-075-A | MD BOARD, COMPLETE | | C957 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF 10% 100V |
| | | ***** | | C958 | 1-126-204-11 | ELECT CHIP | 47uF 20% 16V |
| | | < CAPACITOR > | | C959 | 1-126-204-11 | ELECT CHIP | 47uF 20% 16V |
| C901 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V | C960 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF 10% 50V |
| C902 | 1-163-986-00 | CERAMIC CHIP | 0.027uF 10% 25V | C961 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V |
| C903 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF 10% 50V | C962 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V |
| C904 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF 5% 50V | C963 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF 10% 50V |
| C905 | 1-126-395-11 | ELECT | 22uF 20% 16V | | | < CONNECTOR > | |
| C906 | 1-164-232-11 | CERAMIC CHIP | 0.01uF 50V | * CN901 | 1-506-503-11 | PIN, CONNECTOR 9P | |
| C907 | 1-163-986-00 | CERAMIC CHIP | 0.027uF 10% 25V | * CN903 | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P | |
| C908 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF 10% 50V | CN904 | 1-564-505-11 | PLUG, CONNECTOR 2P | |
| C909 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF 5% 50V | * CN905 | 1-564-515-11 | PLUG, CONNECTOR 12P | |
| C910 | 1-126-395-11 | ELECT | 22uF 20% 16V | * CN906 | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P | |
| | | | | CN907 | 1-695-209-21 | PIN, CONNECTOR (PC BOARD) 15P | |

| Ref.No. | Part No. | Description | Remark | Ref.No. | Part No. | Description | Remark |
|----------------------|--------------|--|--------|--------------|--------------|---------------------------|--------|
| CN908 | 1-764-081-21 | PIN, CONNECTOR (PC BOARD) 9P | | Q911 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| CN909 | 1-764-087-21 | PIN, CONNECTOR (PC BOARD) 14P | | Q912 | 8-729-810-28 | TRANSISTOR 2SC4398 | |
| CN910 | 1-565-728-11 | CONNECTOR, FPC 17P | | Q913 | 8-729-014-00 | TRANSISTOR RN1305 | |
| CN911 | 1-764-080-21 | PIN, CONNECTOR (PC BOARD) 8P | | Q914 | 8-729-820-86 | TRANSISTOR 2SB1121-ST | |
| * CN912 | 1-568-369-11 | HOUSING, CONNECTOR(PC BOARD) 8P | | Q915 | 8-729-820-91 | TRANSISTOR 2SD1621-ST-TC | |
| * CN913 | 1-564-339-00 | PIN, CONNECTOR 5P | | Q916 | 8-729-810-28 | TRANSISTOR 2SC4398 | |
| * CN915 | 1-564-337-00 | PIN, CONNECTOR 3P | | Q917 | 8-729-014-00 | TRANSISTOR RN1305 | |
| * CN916 | 1-564-337-61 | PIN, CONNECTOR 3P | | Q918 | 8-729-820-86 | TRANSISTOR 2SB1121-ST | |
| < DIODE > | | | | Q919 | 8-729-820-91 | TRANSISTOR 2SD1621-ST-TC | |
| D901 | 8-719-104-34 | DIODE 1S2836 | | Q920 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| D902 | 8-719-104-34 | DIODE 1S2836 | | Q921 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| D903 | 8-719-105-46 | DIODE RD3. 3M-B2 | | Q922 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| D904 | 8-719-105-58 | DIODE RD3. 9M-B2 | | Q923 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| < IC > | | | | Q924 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| IC901 | 8-752-850-64 | IC CXP87532-006Q | | Q925 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| IC902 | 8-759-070-64 | IC CXK1024M-ME | | Q926 | 8-729-810-28 | TRANSISTOR 2SC4398 | |
| IC903 | 8-759-107-68 | IC CX20115A | | Q927 | 8-729-810-28 | TRANSISTOR 2SC4398 | |
| IC905 | 8-759-636-20 | IC M54641FP | | Q928 | 8-729-805-64 | TRANSISTOR 2SA1510 | |
| IC906 | 8-759-636-20 | IC M54641FP | | < RESISTOR > | | | |
| IC907 | 8-759-983-69 | IC LM358PS | | R772 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| IC908 | 8-759-983-69 | IC LM358PS | | R773 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| IC910 | 8-759-983-74 | IC LM324NS | | R858 | 1-216-033-00 | METAL CHIP 220 5% 1/10W | |
| IC911 | 8-759-983-69 | IC LM358PS | | R859 | 1-216-033-00 | METAL CHIP 220 5% 1/10W | |
| < COIL > | | | | R860 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L901 | 1-410-387-11 | INDUCTOR CHIP 33uH | | R861 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L905 | 1-414-135-11 | INDUCTOR CHIP 0uH | | R862 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L906 | 1-414-135-11 | INDUCTOR CHIP 0uH | | R863 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| < RESISTOR > | | | | R864 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L902 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R865 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L903 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R866 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L904 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R867 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| L907 | 1-216-295-00 | METAL CHIP 0 5% 1/10W | | R868 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| < PLUNGER SOLENOID > | | | | R869 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| PM901 | 8-835-205-01 | MOTOR DC U-2A (BRAKE) (INCLUDING M903) | | R871 | 1-216-089-91 | METAL GLAZE 47K 5% 1/10W | |
| PM902 | 1-454-522-11 | SOLENOID, PLUNGER (FWD) | | R872 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| < TRANSISTOR > | | | | R873 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| Q901 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R874 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| Q902 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R875 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| Q903 | 8-729-822-84 | TRANSISTOR 2SB1202FAST | | R876 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| Q904 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R877 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| Q905 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R878 | 1-216-089-91 | METAL GLAZE 47K 5% 1/10W | |
| Q906 | 8-729-822-84 | TRANSISTOR 2SB1202FAST | | R882 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| Q907 | 8-729-101-07 | TRANSISTOR 2SB798-DL | | R883 | 1-216-063-00 | METAL CHIP 3. 9K 5% 1/10W | |
| Q908 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R884 | 1-216-041-00 | METAL CHIP 470 5% 1/10W | |
| Q910 | 8-729-101-07 | TRANSISTOR 2SB798-DL | | R885 | 1-216-063-00 | METAL CHIP 3. 9K 5% 1/10W | |
| | | | | R886 | 1-216-041-00 | METAL CHIP 470 5% 1/10W | |
| | | | | R891 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| | | | | R892 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| | | | | R893 | 1-216-049-00 | METAL CHIP 1K 5% 1/10W | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------|----------------|----------|--------------|-------------------------------|----------------------|
| R894 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | R958 | 1-216-083-00 | METAL CHIP | 27K 5% 1/10W |
| R895 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | R959 | 1-216-062-00 | METAL CHIP | 3. 6K 5% 1/10W |
| R896 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | R960 | 1-216-061-00 | METAL CHIP | 3. 3K 5% 1/10W |
| R897 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | R961 | 1-216-084-00 | METAL CHIP | 30K 5% 1/10W |
| R898 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W | R962 | 1-216-058-00 | METAL GLAZE | 2. 4K 5% 1/10W |
| R899 | 1-216-101-00 | METAL CHIP | 150K 5% 1/10W | R963 | 1-216-059-00 | METAL CHIP | 2. 7K 5% 1/10W |
| R901 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R964 | 1-216-029-00 | METAL CHIP | 150 5% 1/10W |
| R902 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R965 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W |
| R903 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R966 | 1-216-025-00 | METAL CHIP | 100 5% 1/10W |
| R904 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R967 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R906 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R968 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R908 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W | R971 | 1-216-101-00 | METAL CHIP | 150K 5% 1/10W |
| R909 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R972 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W |
| R910 | 1-216-025-00 | METAL CHIP | 100 5% 1/10W | R973 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W |
| R911 | 1-216-031-00 | METAL CHIP | 180 5% 1/10W | R974 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W |
| R912 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W | R976 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R913 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R977 | 1-216-041-00 | METAL CHIP | 470 5% 1/10W |
| R914 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R978 | 1-216-041-00 | METAL CHIP | 470 5% 1/10W |
| R915 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R979 | 1-216-041-00 | METAL CHIP | 470 5% 1/10W |
| R916 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R980 | 1-216-041-00 | METAL CHIP | 470 5% 1/10W |
| R918 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R982 | 1-216-065-00 | METAL CHIP | 4. 7K 5% 1/10W |
| R920 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W | R983 | 1-216-065-00 | METAL CHIP | 4. 7K 5% 1/10W |
| R921 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R984 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R922 | 1-216-025-00 | METAL CHIP | 100 5% 1/10W | R985 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R923 | 1-216-031-00 | METAL CHIP | 180 5% 1/10W | R986 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R924 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W | R987 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R925 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R988 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R926 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R989 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R927 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R990 | 1-216-061-00 | METAL CHIP | 3. 3K 5% 1/10W |
| R928 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R991 | 1-216-061-00 | METAL CHIP | 3. 3K 5% 1/10W |
| R930 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R992 | 1-216-061-00 | METAL CHIP | 3. 3K 5% 1/10W |
| R931 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R993 | 1-216-061-00 | METAL CHIP | 3. 3K 5% 1/10W |
| R932 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R994 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R933 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R995 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W |
| R936 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R996 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W |
| R937 | 1-216-049-00 | METAL CHIP | 1K 5% 1/10W | R997 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W |
| R938 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | < VARIABLE RESISTOR > | |
| R939 | 1-216-061-00 | METAL CHIP | 3. 3K 5% 1/10W | RV901 | 1-238-855-11 | RES, ADJ, CERMET 4. 7K | (END SENSOR ADJ (T)) |
| R940 | 1-216-053-00 | METAL CHIP | 1. 5K 5% 1/10W | RV902 | 1-238-855-11 | RES, ADJ, CERMET 4. 7K | (END SENSOR ADJ (S)) |
| R941 | 1-216-029-00 | METAL CHIP | 150 5% 1/10W | | | < VIBRATOR > | |
| R942 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | X901 | 1-760-240-11 | VIBRATOR, CRYSTAL (9. 408MHZ) | |
| R943 | 1-216-041-00 | METAL CHIP | 470 5% 1/10W | | | ***** | |
| R944 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | | | | |
| R945 | 1-216-041-00 | METAL CHIP | 470 5% 1/10W | | | | |
| R950 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W | | | | |
| R951 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | |
| R952 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | |
| R953 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | |
| R954 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | | | | |
| R955 | 1-216-033-00 | METAL CHIP | 220 5% 1/10W | | | | |

MIC AMP

MODE SW

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|----------------------------------|--------|
| * | A-2007-097-A | MIC AMP BOARD, COMPLETE ***** | |
| | | < CAPACITOR > | |
| C102 | 1-124-916-11 | ELECT 22uF 20% 63V | |
| C103 | 1-107-165-00 | MICA 56PF 5% 50V | |
| C104 | 1-136-157-00 | FILM 0.022uF 5% 50V | |
| C105 | 1-107-210-00 | MICA 22PF 5% 500V | |
| C106 | 1-136-169-00 | FILM 0.22uF 5% 50V | |
| C202 | 1-124-916-11 | ELECT 22uF 20% 63V | |
| C203 | 1-107-165-00 | MICA 56PF 5% 50V | |
| C204 | 1-136-157-00 | FILM 0.022uF 5% 50V | |
| C205 | 1-107-210-00 | MICA 22PF 5% 500V | |
| C206 | 1-136-169-00 | FILM 0.22uF 5% 50V | |
| C301 | 1-124-910-11 | ELECT 47uF 20% 50V | |
| C302 | 1-124-910-11 | ELECT 47uF 20% 50V | |
| | | < CONNECTOR > | |
| CN034 | 1-691-768-11 | PLUG (MICRO CONNECTOR) 6P | |
| * CN132 | 1-564-495-11 | PIN, CONNECTOR 2P | |
| | | < IC > | |
| IC300 | 8-759-900-72 | IC NE5532P | |
| | | < JACK > | |
| * J101 | 1-764-618-11 | JACK (LARGE TYPE) (MIC R) | |
| * J201 | 1-764-618-11 | JACK (LARGE TYPE) (MIC L) | |
| | | < TRANSISTOR > | |
| Q101 | 8-729-107-85 | TRANSISTOR 2SC3623A-K | |
| Q102 | 8-729-024-40 | TRANSISTOR 2SK369-GR-TP2 | |
| Q103 | 8-729-024-40 | TRANSISTOR 2SK369-GR-TP2 | |
| Q104 | 8-729-803-82 | TRANSISTOR 2SC3468-E | |
| Q105 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q106 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | |
| Q201 | 8-729-107-85 | TRANSISTOR 2SC3623A-K | |
| Q202 | 8-729-024-40 | TRANSISTOR 2SK369-GR-TP2 | |
| Q203 | 8-729-024-40 | TRANSISTOR 2SK369-GR-TP2 | |
| Q204 | 8-729-803-82 | TRANSISTOR 2SC3468-E | |
| Q205 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q206 | 8-729-204-90 | TRANSISTOR 2SK246-GR1 | |
| Q301 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | | < RESISTOR > | |
| R100 | 1-259-500-11 | CARBON 1M 5% 1/6W | |
| R103 | 1-259-446-11 | CARBON 5.6K 5% 1/6W | |
| R104 | 1-259-423-11 | CARBON 620 5% 1/6W | |
| R105 | 1-259-444-11 | CARBON 4.7K 5% 1/6W | |
| R106 | 1-259-468-11 | CARBON 47K 5% 1/6W | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|---------------------------|--------|
| R107 | 1-259-404-11 | CARBON 100 5% 1/6W | |
| R108 | 1-259-425-11 | CARBON 750 5% 1/6W | |
| R109 | 1-259-397-11 | CARBON 51 5% 1/6W | |
| R110 | 1-259-425-11 | CARBON 750 5% 1/6W | |
| R111 | 1-259-420-11 | CARBON 470 5% 1/6W | |
| R112 | 1-259-394-11 | CARBON 39 5% 1/6W | |
| R113 | 1-259-412-11 | CARBON 220 5% 1/6W | |
| R114 | 1-259-412-11 | CARBON 220 5% 1/6W | |
| R115 | 1-259-460-11 | CARBON 22K 5% 1/6W | |
| R116 | 1-259-476-11 | CARBON 100K 5% 1/6W | |
| R200 | 1-259-500-11 | CARBON 1M 5% 1/6W | |
| R203 | 1-259-446-11 | CARBON 5.6K 5% 1/6W | |
| R204 | 1-259-423-11 | CARBON 620 5% 1/6W | |
| R205 | 1-259-444-11 | CARBON 4.7K 5% 1/6W | |
| R206 | 1-259-468-11 | CARBON 47K 5% 1/6W | |
| R207 | 1-259-404-11 | CARBON 100 5% 1/6W | |
| R208 | 1-259-425-11 | CARBON 750 5% 1/6W | |
| R209 | 1-259-397-11 | CARBON 51 5% 1/6W | |
| R210 | 1-259-425-11 | CARBON 750 5% 1/6W | |
| R211 | 1-259-420-11 | CARBON 470 5% 1/6W | |
| R212 | 1-259-394-11 | CARBON 39 5% 1/6W | |
| R213 | 1-259-412-11 | CARBON 220 5% 1/6W | |
| R214 | 1-259-412-11 | CARBON 220 5% 1/6W | |
| R215 | 1-259-460-11 | CARBON 22K 5% 1/6W | |
| R216 | 1-259-476-11 | CARBON 100K 5% 1/6W | |
| R301 | 1-259-468-11 | CARBON 47K 5% 1/6W | |
| R302 | 1-259-426-11 | CARBON 820 5% 1/6W | |
| ***** | | | |
| * | 1-650-799-11 | MODE SW BOARD ***** | |
| | | < CONNECTOR > | |
| * CN657 | 1-564-337-61 | PIN, CONNECTOR 3P | |
| | | < RESISTOR > | |
| R660 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | |
| R669 | 1-249-418-11 | CARBON 1.2K 5% 1/4W F | |
| R670 | 1-247-836-11 | CARBON 1.6K 5% 1/4W | |
| R671 | 1-249-421-11 | CARBON 2.2K 5% 1/4W F | |
| R672 | 1-249-423-11 | CARBON 3.3K 5% 1/4W F | |
| R674 | 1-249-418-11 | CARBON 1.2K 5% 1/4W F | |
| R675 | 1-247-836-11 | CARBON 1.6K 5% 1/4W | |
| | | < SWITCH > | |
| S655 | 1-692-810-11 | SWITCH, ROTARY (INPUT) | |
| S656 | 1-692-809-11 | SWITCH, ROTARY (REC MODE) | |
| ***** | | | |

PANEL (L)

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|----------------|----------|--------------|------------------------------|--------|
| * | A-2007-186-A | PANEL (L) BOARD, COMPLETE (AEP, G) ***** | | | | < IC > | |
| * | A-2007-193-A | PANEL (L) BOARD, COMPLETE (US) ***** | | IC601 | 8-752-853-31 | IC CXP82220-014Q | |
| | | | | IC602 | 8-759-504-23 | IC RF5C62 | |
| | | | | | | < TRANSISTOR > | |
| * | 3-908-782-01 | HOLDER (FL TUBE) | | Q601 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | 9-911-839-XX | CUSHION | | Q602 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| * | 4-911-676-41 | SPACER, LED | | Q603 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | | < CAPACITOR > | | Q604 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | | | | Q605 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| C601 | 1-124-584-00 | ELECT | 100uF 20% 10V | Q607 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| C602 | 1-124-248-00 | ELECT | 22uF 20% 35V | Q608 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| C603 | 1-164-159-11 | CERAMIC | 0.1uF 50V | | | < RESISTOR > | |
| C604 | 1-164-159-11 | CERAMIC | 0.1uF 50V | R601 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| C605 | 1-162-306-11 | CERAMIC | 0.01uF 20% 16V | R602 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| C606 | 1-164-159-11 | CERAMIC | 0.1uF 50V | R603 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| C607 | 1-162-205-31 | CERAMIC | 18PF 5% 50V | R604 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| C608 | 1-162-199-31 | CERAMIC | 10PF 5% 50V | R608 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| | | < CONNECTOR > | | R610 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| * CN603 | 1-580-562-11 | PIN, CONNECTOR (PC BOARD) 14P | | R611 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| * CN604 | 1-580-563-11 | PIN, CONNECTOR (PC BOARD) 16P | | R612 | 1-249-441-11 | CARBON 100K 5% 1/4W (AEP, G) | |
| | | < COMPOSITION CIRCUIT BLOCK > | | R613 | 1-249-441-11 | CARBON 100K 5% 1/4W (US) | |
| | | | | R614 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| CP601 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R616 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| CP602 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R617 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| CP603 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R618 | 1-249-413-11 | CARBON 470 5% 1/4W F | |
| CP604 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R619 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| CP605 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R620 | 1-249-409-11 | CARBON 220 5% 1/4W F | |
| CP606 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R621 | 1-249-409-11 | CARBON 220 5% 1/4W F | |
| CP607 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R622 | 1-249-409-11 | CARBON 220 5% 1/4W F | |
| CP608 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | | R623 | 1-249-409-11 | CARBON 220 5% 1/4W F | |
| | | < TRIMMER > | | R624 | 1-249-409-11 | CARBON 220 5% 1/4W F | |
| | | | | R625 | 1-249-428-11 | CARBON 8.2K 5% 1/4W F | |
| CT601 | 1-141-334-11 | CAP, VAR, TRIMMER (CLOCK FREQUENCY) | | R626 | 1-249-418-11 | CARBON 1.2K 5% 1/4W F | |
| | | < DIODE > | | R627 | 1-247-836-11 | CARBON 1.6K 5% 1/4W | |
| D601 | 8-719-911-06 | DIODE 1SS106 | | R628 | 1-249-421-11 | CARBON 2.2K 5% 1/4W F | |
| D602 | 8-719-911-06 | DIODE 1SS106 | | R629 | 1-249-428-11 | CARBON 8.2K 5% 1/4W F | |
| D603 | 8-719-987-63 | DIODE 1N4148M | | R630 | 1-249-418-11 | CARBON 1.2K 5% 1/4W F | |
| D604 | 8-719-304-16 | DIODE SEL2510W-D (▶) | | R631 | 1-247-836-11 | CARBON 1.6K 5% 1/4W | |
| D605 | 8-719-934-34 | DIODE AA3432S (PAUSE ■) | | R632 | 1-249-421-11 | CARBON 2.2K 5% 1/4W F | |
| D606 | 8-719-938-69 | DIODE GL3PR8 (REC ●) | | R633 | 1-249-428-11 | CARBON 8.2K 5% 1/4W F | |
| D607 | 8-719-934-34 | DIODE AA3432S (AUTO) | | R634 | 1-249-418-11 | CARBON 1.2K 5% 1/4W F | |
| D608 | 8-719-934-34 | DIODE AA3432S (RENUMBER) | | R635 | 1-247-836-11 | CARBON 1.6K 5% 1/4W | |
| | | < FLUORESCENT INDICATOR TUBE > | | R636 | 1-249-421-11 | CARBON 2.2K 5% 1/4W F | |
| FL601 | 1-517-271-11 | INDICATOR TUBE, FLUORESCENT | | R637 | 1-249-423-11 | CARBON 3.3K 5% 1/4W F | |
| | | | | R638 | 1-249-428-11 | CARBON 8.2K 5% 1/4W F | |
| | | | | R639 | 1-249-418-11 | CARBON 1.2K 5% 1/4W F | |
| | | | | R640 | 1-247-836-11 | CARBON 1.6K 5% 1/4W | |

PANEL (L)

PANEL (R)

| Ref. No. | Part No. | Description | Remark |
|---------------|--------------|-------------------------------------|--------|
| R641 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | F |
| R642 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | F |
| R646 | 1-249-388-11 | CARBON 3.9 5% 1/6W | F |
| R647 | 1-249-388-11 | CARBON 3.9 5% 1/6W | F |
| R658 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| < SWITCH > | | | |
| S602 | 1-554-303-21 | SWITCH, TACTILE (■) | |
| S603 | 1-554-303-21 | SWITCH, TACTILE (▶) | |
| S604 | 1-554-303-21 | SWITCH, TACTILE (AMS ⏏) | |
| S605 | 1-554-303-21 | SWITCH, TACTILE (ANS ⏏) | |
| S606 | 1-554-303-21 | SWITCH, TACTILE (◀▶) | |
| S607 | 1-554-303-21 | SWITCH, TACTILE (▶▶) | |
| S608 | 1-554-303-21 | SWITCH, TACTILE (REC ●) | |
| S609 | 1-554-303-21 | SWITCH, TACTILE (PAUSE) | |
| S610 | 1-554-303-21 | SWITCH, TACTILE (REC MUTE ●) | |
| S611 | 1-554-303-21 | SWITCH, TACTILE (CLOCK SET) | |
| S612 | 1-554-303-21 | SWITCH, TACTILE (MEMORY) | |
| S613 | 1-554-303-21 | SWITCH, TACTILE (RESET) | |
| S614 | 1-554-303-21 | SWITCH, TACTILE (MODE) | |
| S615 | 1-554-303-21 | SWITCH, TACTILE (AUTO) | |
| S616 | 1-554-303-21 | SWITCH, TACTILE (RENUMBER) | |
| S617 | 1-554-303-21 | SWITCH, TACTILE (WRITE) | |
| S618 | 1-554-303-21 | SWITCH, TACTILE (ERASE) | |
| < VIBRATOR > | | | |
| X601 | 1-577-359-21 | VIBRATOR, CERAMIC (4.19MHz) | |
| X602 | 1-567-098-00 | OSCILLATOR, CRYSTAL (32.768kHz) | |
| ***** | | | |
| * | A-2007-083-A | PANEL (R) BOARD, COMPLETE (US, AEP) | |
| ***** | | | |
| * | A-2007-187-A | PANEL (R) BOARD, COMPLETE (G) | |
| ***** | | | |
| * | 3-385-607-01 | HOLDER, FL TUBE | |
| | 9-911-844-XX | CUSHION | |
| * | 4-911-676-41 | SPACER, LED | |
| < CAPACITOR > | | | |
| C650 | 1-124-584-00 | ELECT 100uF 20% 10V | |
| C652 | 1-124-248-00 | ELECT 22uF 20% 35V | |
| C653 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C654 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C655 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C656 | 1-162-306-11 | CERAMIC 0.01uF 20% 16V | |
| C657 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| < CONNECTOR > | | | |
| * CN651 | 1-580-563-11 | PIN, CONNECTOR (PC BOARD) 16P | |

| Ref. No. | Part No. | Description | Remark |
|-------------------------------|--------------|------------------------------------|-------------|
| < COMPOSITION CIRCUIT BLOCK > | | | |
| CP650 | 1-239-832-11 | COMPOSITION CIRCUIT BLOCK | |
| CP651 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | |
| CP652 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | |
| CP653 | 1-239-832-11 | COMPOSITION CIRCUIT BLOCK | |
| CP654 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | |
| CP655 | 1-239-822-11 | COMPOSITION CIRCUIT BLOCK | |
| CP656 | 1-239-832-11 | COMPOSITION CIRCUIT BLOCK | |
| < DIODE > | | | |
| D651 | 8-719-304-16 | SEL2510W-D (TAPE) (US, AEP) | |
| < FLUORESCENT INDICATOR > | | | |
| FL651 | 1-517-272-11 | INDICATOR TUBE, FLUORESCENT | |
| < IC > | | | |
| IC651 | 8-752-850-63 | IC CXP82220-009Q | |
| IC652 | 8-759-500-05 | IC MSM6338MS-K | |
| < TRANSISTOR > | | | |
| Q651 | 8-729-900-80 | TRANSISTOR DTC114ES (US, AEP) | |
| Q652 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q653 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q654 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| < RESISTOR > | | | |
| R656 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R657 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R659 | 1-249-413-11 | CARBON 470 5% 1/4W | F |
| R661 | 1-249-413-11 | CARBON 470 5% 1/4W | F (US, AEP) |
| R663 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R664 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R665 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R666 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R667 | 1-249-409-11 | CARBON 220 5% 1/4W | F |
| R668 | 1-249-428-11 | CARBON 8.2K 5% 1/4W | F |
| R673 | 1-249-428-11 | CARBON 8.2K 5% 1/4W | F |
| R676 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R677 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R678 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R679 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R680 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R681 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| < SWITCH > | | | |
| S651 | 1-554-303-21 | SWITCH, TACTILE (MARGIN RESET) | |
| S654 | 1-692-839-11 | SWITCH, TOGGLE (MONITOR) (US, AEP) | |

PANEL (R) PIN JACK POWER REC VOL

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|---|--------|
| | | < VIBRATOR > | |
| X651 | 1-577-359-21 | VIBRATOR, CERAMIC (4.19MHz) | |
| ***** | | | |
| * | 1-650-807-11 | PIN JACK BOARD ***** | |
| | | < CAPACITOR > | |
| C101 | 1-136-810-11 | FILM 220PF 5% 100V | |
| C141 | 1-136-810-11 | FILM 220PF 5% 100V | |
| C201 | 1-136-810-11 | FILM 220PF 5% 100V | |
| C241 | 1-136-810-11 | FILM 220PF 5% 100V | |
| | | < CONNECTOR > | |
| CN032 | 1-691-766-11 | PLUG (MICRO CONNECTOR) 4P | |
| CN137 | 1-691-766-31 | PLUG (MICRO CONNECTOR) 4P | |
| | | < JACK > | |
| J301 | 1-568-101-11 | JACK, PIN 4P (LINE IN, LINE OUT) | |
| | | < RESISTOR > | |
| R173 | 1-247-739-11 | CARBON 100 5% 1/2W | |
| R273 | 1-247-739-11 | CARBON 100 5% 1/2W | |
| ***** | | | |
| * | A-2007-087-A | POWER BOARD, COMPLETE (AEP, G) ***** | |
| * | A-2007-234-A | POWER BOARD, COMPLETE (US) ***** | |
| * | 1-650-796-11 | POWER BOARD | |
| * | 4-942-204-01 | PLATE, GROUND | |
| * | 1-533-293-11 | FUSE HOLDER (US) | |
| | | < CAPACITOR > | |
| C920 | 1-126-024-11 | ELECT 220uF 20% 16V | |
| C921 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C922 | 1-124-473-11 | ELECT 1000uF 20% 10V | |
| C923 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C924 | 1-126-024-11 | ELECT 220uF 20% 16V | |
| C925 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C926 | 1-124-473-11 | ELECT 1000uF 20% 10V | |
| C927 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C928 | 1-126-024-11 | ELECT 220uF 20% 16V | |
| C929 | 1-126-022-11 | ELECT 47uF 20% 10V | |
| C930 | 1-124-473-11 | ELECT 1000uF 20% 10V | |
| △C940 | 1-161-744-51 | CERAMIC 0.01uF 400V | |
| △C941 | 1-161-744-51 | CERAMIC 0.01uF 400V | |
| △C942 | 1-161-742-00 | CERAMIC 0.0022uF 20% 400V | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|--|--------|
| △C943 | 1-161-742-00 | CERAMIC 0.0022uF 20% 400V | |
| △C944 | 1-161-742-00 | CERAMIC 0.0022uF 20% 400V | |
| △C945 | 1-161-742-00 | CERAMIC 0.0022uF 20% 400V (AEP, G) | |
| | | < CONNECTOR > | |
| * CN920 | 1-564-512-11 | PLUG, CONNECTOR 9P | |
| * CN921 | 1-564-340-00 | PIN, CONNECTOR 6P | |
| CN922 | 1-564-506-11 | PLUG, CONNECTOR 3P | |
| * CN923 | 1-564-706-11 | PIN, CONNECTOR (SMALL TYPE) 4P | |
| * CN924 | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P | |
| * CN940 | 1-564-321-00 | PIN, CONNECTOR 2P | |
| CN941 | 1-580-629-21 | PIN, CONNECTOR 2P | |
| * CN942 | 1-565-395-11 | PIN, CONNECTOR 3P | |
| | | < DIODE > | |
| D920 | 8-719-200-77 | DIODE 10E2N | |
| D921 | 8-719-200-77 | DIODE 10E2N | |
| | | < FUSE > | |
| △F903 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| | | < IC > | |
| IC920 | 8-759-144-82 | IC UPC2405HF | |
| IC921 | 8-759-148-79 | IC UPC2406HF | |
| | | < COIL > | |
| △L940 | 1-421-915-11 | COIL, LINE FILTER | |
| | | < TRANSISTOR > | |
| Q920 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q921 | 8-729-209-15 | TRANSISTOR 2SD2012 | |
| | | < RESISTOR > | |
| R920 | 1-249-425-11 | CARBON 4.7K 5% 1/4W F | |
| R921 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| ***** | | | |
| * | 1-650-805-11 | REC VOL BOARD ***** | |
| | | < CONNECTOR > | |
| CN302 | 1-691-766-11 | PLUG (MICRO CONNECTOR) 4P | |
| | | < DIODE > | |
| D301 | 8-719-987-63 | DIODE 1N4148M | |

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

REC VOL RECT REMOTE CONTROL

| Ref.No. | Part No. | Description | Remark | Ref.No. | Part No. | Description | Remark |
|-----------------------|--------------|-------------------------------|--------------------------|----------------|--------------|--------------------------------------|--------|
| < RESISTOR > | | | | | | | |
| R101 | 1-249-486-11 | CARBON | 12K 5% 1/2W | D911 | 8-719-200-77 | DIODE 10E2N | |
| R102 | 1-249-703-11 | CARBON | 18K 5% 1/2W | D912 | 8-719-002-48 | DIODE UZL-27H | |
| R201 | 1-249-486-11 | CARBON | 12K 5% 1/2W | D913 | 8-719-014-70 | DIODE UZP-5.6BB | |
| R202 | 1-249-703-11 | CARBON | 18K 5% 1/2W | < FUSE > | | | |
| < VARIABLE RESISTOR > | | | | | | | |
| RV301 | 1-241-360-11 | RES, VAR, CARBON | 50K/50K | △F901 | 1-532-286-00 | FUSE, TIME-LAG (2.5A, 250V) (AEP, G) | |
| < RELAY > | | | | △F901 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| RY301 | 1-515-804-11 | RELAY | | △F902 | 1-532-286-00 | FUSE, TIME-LAG (2.5A, 250V) (AEP, G) | |
| ***** | | | | △F902 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| * | A-2007-099-A | RECT BOARD, COMPLETE (US) | | < RESISTOR > | | | |
| ***** | | | | △FR901 | 1-212-865-00 | FUSIBLE 22 5% 1/4W F | |
| * | A-2007-243-A | RECT BOARD, COMPLETE (AEP, G) | | △FR902 | 1-212-849-00 | FUSIBLE 4.7 5% 1/4W F | |
| ***** | | | | △FR903 | 1-219-137-11 | FUSIBLE 0.33 10% 1/4W | |
| * | 1-533-293-11 | FUSE HOLDER | | < TRANSISTOR > | | | |
| < CAPACITOR > | | | | Q901 | 8-729-140-97 | TRANSISTOR 2SB734-34 | |
| C901 | 1-109-875-11 | ELECT | 10000uF 20% 35V (AEP, G) | < RESISTOR > | | | |
| C901 | 1-126-982-31 | ELECT | 5600uF 20% 35V (US) | R901 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| C901 | 1-109-875-11 | ELECT | 10000uF 20% 35V (AEP, G) | R902 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| C902 | 1-126-982-31 | ELECT | 5600uF 20% 35V (US) | < THERMISTOR > | | | |
| C903 | 1-136-165-00 | FILM | 0.1uF 5% 50V | TH901 | 1-808-065-11 | THERMISTOR, POSITIVE | |
| ***** | | | | TH902 | 1-808-065-11 | THERMISTOR, POSITIVE | |
| C904 | 1-136-177-00 | FILM | 1uF 5% 50V | ***** | | | |
| C905 | 1-126-017-11 | ELECT | 6800uF 20% 16V | * | 1-650-794-11 | REMOTE CONTROL BOARD | |
| C906 | 1-126-946-11 | ELECT | 6800uF 20% 25V | ***** | | | |
| C907 | 1-126-053-11 | ELECT | 220uF 20% 50V | < CAPACITOR > | | | |
| C908 | 1-126-053-11 | ELECT | 220uF 20% 50V | C618 | 1-164-159-11 | CERAMIC 0.1uF 50V | |
| C909 | 1-126-059-11 | ELECT | 10uF 20% 50V | < CONNECTOR > | | | |
| C910 | 1-126-052-11 | ELECT | 100uF 20% 35V | * CN607 | 1-564-338-00 | PIN, CONNECTOR 4P | |
| C911 | 1-164-159-11 | CERAMIC | 0.1uF 50V | < IC > | | | |
| C912 | 1-124-999-11 | ELECT | 2200uF 20% 10V | IC603 | 8-749-922-36 | IC GP1U50XB | |
| < CONNECTOR > | | | | < RESISTOR > | | | |
| * CN901 | 1-564-104-00 | PIN, CONNECTOR (B3P-VH) | 3P | R643 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | |
| CN903 | 1-691-767-11 | PLUG (MICRO CONNECTOR) | 5P | R644 | 1-247-856-00 | CARBON 11K 5% 1/4W | |
| CN904 | 1-564-506-11 | PLUG (MICRO CONNECTOR) | 5P | < SWITCH > | | | |
| < DIODE > | | | | S619 | 1-572-210-11 | SWITCH, SLIDE (TIMER) | |
| D901 | 8-719-230-02 | DIODE | 30DF2 | ***** | | | |
| D902 | 8-719-230-02 | DIODE | 30DF2 | | | | |
| D903 | 8-719-230-02 | DIODE | 30DF2 | | | | |
| D904 | 8-719-230-02 | DIODE | 30DF2 | | | | |
| D905 | 8-719-312-47 | DIODE | RBA-406B | | | | |
| D906 | 8-719-312-47 | DIODE | RBA-406B | | | | |
| D910 | 8-719-200-77 | DIODE | 10E2N | | | | |

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

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------------------------------|--------|
| * | A-2006-455-A | RF AMP BOARD, COMPLETE (G) ***** | |
| | | < CAPACITOR > | |
| C1 | 1-124-778-00 | ELECT CHIP 22uF 20% | 6.3V |
| C2 | 1-163-019-00 | CERAMIC CHIP 0.0068uF 10% | 50V |
| C3 | 1-163-117-00 | CERAMIC CHIP 100PF 5% | 50V |
| C4 | 1-162-638-11 | CERAMIC CHIP 1uF | 16V |
| C5 | 1-164-299-11 | CERAMIC CHIP 0.22uF 10% | 25V |
| C6 | 1-164-004-11 | CERAMIC CHIP 0.1uF 10% | 25V |
| C7 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% | 50V |
| C8 | 1-124-778-00 | ELECT CHIP 22uF 20% | 6.3V |
| C9 | 1-124-778-00 | ELECT CHIP 22uF 20% | 6.3V |
| C10 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% | 50V |
| C11 | 1-164-004-11 | CERAMIC CHIP 0.1uF 10% | 25V |
| C12 | 1-164-299-11 | CERAMIC CHIP 0.22uF 10% | 25V |
| C13 | 1-162-638-11 | CERAMIC CHIP 1uF | 16V |
| C14 | 1-163-117-00 | CERAMIC CHIP 100PF 5% | 50V |
| C15 | 1-124-778-00 | ELECT CHIP 22uF 20% | 6.3V |
| C16 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C17 | 1-163-001-11 | CERAMIC CHIP 220PF 10% | 50V |
| C18 | 1-163-117-00 | CERAMIC CHIP 100PF 5% | 50V |
| C19 | 1-163-001-11 | CERAMIC CHIP 220PF 10% | 50V |
| C20 | 1-164-182-11 | CERAMIC CHIP 0.0033uF 10% | 50V |
| C21 | 1-163-005-11 | CERAMIC CHIP 470PF 10% | 50V |
| C22 | 1-126-603-11 | ELECT CHIP 4.7uF 20% | 35V |
| C23 | 1-163-117-00 | CERAMIC CHIP 100PF 5% | 50V |
| C24 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C25 | 1-124-778-00 | ELECT CHIP 22uF 20% | 6.3V |
| C26 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C27 | 1-162-638-11 | CERAMIC CHIP 1uF | 16V |
| C28 | 1-164-505-11 | CERAMIC CHIP 2.2uF | 16V |
| | | < CONNECTOR > | |
| * CN51 | 1-566-207-11 | PIN, CONNECTOR (PC BOARD) 14P | |
| * CN52 | 1-564-720-11 | PIN, CONNECTOR (SMALL TYPE) 4P | |
| | | < IC > | |
| IC1 | 8-752-039-01 | IC CXA1364R | |
| | | < COIL > | |
| L1 | 1-408-781-00 | INDUCTOR CHIP 22uH | |
| L2 | 1-408-789-21 | INDUCTOR CHIP 100uH | |
| L3 | 1-408-781-00 | INDUCTOR CHIP 22uH | |
| | | < RESISTOR > | |
| R1 | 1-216-082-00 | METAL GLAZE 24K 5% | 1/10W |
| R2 | 1-216-082-00 | METAL GLAZE 24K 5% | 1/10W |
| R3 | 1-216-066-00 | METAL CHIP 5.1K 5% | 1/10W |
| R4 | 1-216-066-00 | METAL CHIP 5.1K 5% | 1/10W |

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|--------|
| R5 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W |
| R6 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W |
| R7 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W |
| R8 | 1-216-079-00 | METAL CHIP 18K 5% | 1/10W |
| R9 | 1-216-075-00 | METAL CHIP 12K 5% | 1/10W |
| R10 | 1-216-079-00 | METAL CHIP 18K 5% | 1/10W |
| R12 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W |
| R13 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W |
| R14 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W |
| R15 | 1-216-085-00 | METAL CHIP 33K 5% | 1/10W |
| R16 | 1-216-089-91 | METAL GLAZE 47K 5% | 1/10W |
| R17 | 1-216-080-00 | METAL CHIP 20K 5% | 1/10W |
| R18 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| | | < VARIABLE RESISTOR > | |
| RV1 | 1-238-181-11 | RES, ADJ, CERMET 4.7K | |
| RV2 | 1-238-181-11 | RES, ADJ, CERMET 4.7K | |
| ***** | | | |
| * | A-2006-207-A | RF AMP (PB) BOARD, COMPLETE (US, AEP) ***** | |
| | | < CAPACITOR > | |
| C51 | 1-124-779-00 | ELECT CHIP 10uF 20% | 16V |
| C52 | 1-163-117-00 | CERAMIC CHIP 100PF 5% | 50V |
| C53 | 1-162-638-11 | CERAMIC CHIP 1uF | 16V |
| C54 | 1-164-299-11 | CERAMIC CHIP 0.22uF 10% | 25V |
| C55 | 1-164-004-11 | CERAMIC CHIP 0.1uF 10% | 25V |
| C57 | 1-124-779-00 | ELECT CHIP 10uF 20% | 16V |
| C58 | 1-164-004-11 | CERAMIC CHIP 0.1uF 10% | 25V |
| C59 | 1-164-299-11 | CERAMIC CHIP 0.22uF 10% | 25V |
| C60 | 1-162-638-11 | CERAMIC CHIP 1uF | 16V |
| C61 | 1-163-117-00 | CERAMIC CHIP 100PF 5% | 50V |
| C62 | 1-124-779-00 | ELECT CHIP 10uF 20% | 16V |
| C63 | 1-163-005-11 | CERAMIC CHIP 470PF 10% | 50V |
| C64 | 1-163-005-11 | CERAMIC CHIP 470PF 10% | 50V |
| C66 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% | 50V |
| C69 | 1-124-779-00 | ELECT CHIP 10uF 20% | 16V |
| C70 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C71 | 1-164-005-11 | CERAMIC CHIP 0.47uF | 25V |
| C72 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| | | < CONNECTOR > | |
| CN51 | 1-569-349-11 | CONNECTOR, F.P.C 6P | |
| * CN52 | 1-564-725-11 | PIN, CONNECTOR (SMALL TYPE) 9P | |
| | | < IC > | |
| IC51 | 8-752-039-01 | IC CXA1364R | |

RF AMP (PB)

RF AMP (REC/PB)

| Ref.No. | Part No. | Description | Remark |
|----------------|--------------|---|--------|
| < COIL > | | | |
| L51 | 1-408-781-00 | INDUCTOR CHIP 22uH | |
| L52 | 1-408-789-21 | INDUCTOR CHIP 100uH | |
| L53 | 1-408-781-00 | INDUCTOR CHIP 22uH | |
| < TRANSISTOR > | | | |
| Q51 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q52 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q53 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q54 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q55 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| < RESISTOR > | | | |
| R51 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |
| R52 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R53 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R54 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |
| R55 | 1-216-083-00 | METAL CHIP 27K 5% 1/10W | |
| R56 | 1-216-089-91 | METAL GLAZE 47K 5% 1/10W | |
| R57 | 1-216-084-00 | METAL CHIP 30K 5% 1/10W | |
| R58 | 1-216-085-00 | METAL CHIP 33K 5% 1/10W | |
| R59 | 1-216-085-00 | METAL CHIP 33K 5% 1/10W | |
| R60 | 1-216-689-11 | METAL CHIP 39K 0.5% 1/10W | |
| R61 | 1-216-075-00 | METAL CHIP 12K 5% 1/10W | |
| R62 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R63 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |
| ***** | | | |
| * | A-2006-561-A | RF AMP (REC/PB) BOARD, COMPLETE (US, AEP) | |
| ***** | | | |
| < CAPACITOR > | | | |
| C1 | 1-163-038-00 | CERAMIC CHIP 0.1uF 25V | |
| C2 | 1-124-778-00 | ELECT CHIP 22uF 20% 6.3V | |
| C3 | 1-163-038-00 | CERAMIC CHIP 0.1uF 25V | |
| C4 | 1-124-778-00 | ELECT CHIP 22uF 20% 6.3V | |
| C5 | 1-163-117-00 | CERAMIC CHIP 100PF 5% 50V | |
| C6 | 1-162-637-11 | CERAMIC CHIP 0.47uF 16V | |
| C7 | 1-164-299-11 | CERAMIC CHIP 0.22uF 10% 25V | |
| C8 | 1-163-038-00 | CERAMIC CHIP 0.1uF 25V | |
| C9 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% 50V | |
| C10 | 1-163-038-00 | CERAMIC CHIP 0.1uF 25V | |
| C11 | 1-124-778-00 | ELECT CHIP 22uF 20% 6.3V | |
| C12 | 1-162-638-11 | CERAMIC CHIP 1uF 16V | |
| C13 | 1-126-206-11 | ELECT CHIP 100uF 20% 6.3V | |
| C14 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% 50V | |
| C15 | 1-163-038-00 | CERAMIC CHIP 0.1uF 25V | |
| C16 | 1-164-299-11 | CERAMIC CHIP 0.22uF 10% 25V | |
| C17 | 1-162-637-11 | CERAMIC CHIP 0.47uF 16V | |
| C18 | 1-163-117-00 | CERAMIC CHIP 100PF 5% 50V | |

| Ref.No. | Part No. | Description | Remark |
|----------------|--------------|-------------------------------|----------|
| C19 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C20 | 1-124-778-00 | ELECT CHIP 22uF | 20% 6.3V |
| C21 | 1-163-038-00 | CERAMIC CHIP 0.1uF | 25V |
| C22 | 1-163-003-11 | CERAMIC CHIP 330PF | 10% 50V |
| C23 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% 50V |
| C24 | 1-163-003-11 | CERAMIC CHIP 330PF | 10% 50V |
| C25 | 1-164-182-11 | CERAMIC CHIP 0.0033uF | 10% 50V |
| C26 | 1-163-007-11 | CERAMIC CHIP 680PF | 10% 50V |
| C27 | 1-164-337-11 | CERAMIC CHIP 2.2uF | 16V |
| C28 | 1-163-019-00 | CERAMIC CHIP 0.0068uF | 10% 50V |
| < CONNECTOR > | | | |
| CN1 | 1-569-349-11 | CONNECTOR, F.P.C 6P | |
| * CN2 | 1-566-194-11 | PIN, CONNECTOR (PC BOARD) 15P | |
| < IC > | | | |
| IC1 | 8-752-039-01 | IC CXA1364R | |
| < COIL > | | | |
| L1 | 1-408-781-00 | INDUCTOR CHIP 22uH | |
| L2 | 1-408-781-00 | INDUCTOR CHIP 22uH | |
| L3 | 1-408-777-00 | INDUCTOR CHIP 10uH | |
| L4 | 1-408-789-21 | INDUCTOR CHIP 100uH | |
| < TRANSISTOR > | | | |
| Q1 | 8-729-903-82 | TRANSISTOR FMW2 | |
| Q2 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q3 | 8-729-903-82 | TRANSISTOR FMW2 | |
| Q4 | 8-729-903-82 | TRANSISTOR FMW2 | |
| Q5 | 8-729-903-82 | TRANSISTOR FMW2 | |
| < RESISTOR > | | | |
| R1 | 1-216-025-00 | METAL CHIP 100 5% 1/10W | |
| R2 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| R3 | 1-216-076-00 | METAL CHIP 13K 5% 1/10W | |
| R4 | 1-216-076-00 | METAL CHIP 13K 5% 1/10W | |
| R5 | 1-216-096-00 | METAL GLAZE 91K 5% 1/10W | |
| R6 | 1-216-096-00 | METAL GLAZE 91K 5% 1/10W | |
| R7 | 1-216-066-00 | METAL CHIP 5.1K 5% 1/10W | |
| R8 | 1-216-066-00 | METAL CHIP 5.1K 5% 1/10W | |
| R9 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R10 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R11 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R12 | 1-216-079-00 | METAL CHIP 18K 5% 1/10W | |
| R13 | 1-216-075-00 | METAL CHIP 12K 5% 1/10W | |
| R14 | 1-216-079-00 | METAL CHIP 18K 5% 1/10W | |
| R15 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R16 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R17 | 1-216-077-00 | METAL CHIP 15K 5% 1/10W | |
| R18 | 1-216-044-00 | METAL CHIP 620 5% 1/10W | |

RF AMP (REC/PB) S-END SBM SW T-END

| Ref.No. | Part No. | Description | Remark |
|-----------------------|--------------|-------------------------------------|--------|
| R19 | 1-216-083-00 | METAL CHIP 27K 5% 1/10W | |
| R20 | 1-216-078-00 | METAL GLAZE 16K 5% 1/10W | |
| R21 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | |
| R22 | 1-216-096-00 | METAL GLAZE 91K 5% 1/10W | |
| R23 | 1-216-078-00 | METAL GLAZE 16K 5% 1/10W | |
| R24 | 1-216-083-00 | METAL CHIP 27K 5% 1/10W | |
| < VARIABLE RESISTOR > | | | |
| RV1 | 1-238-181-11 | RES, ADJ, CERMET 4.7K | |
| RV2 | 1-238-181-11 | RES, ADJ, CERMET 4.7K | |
| RV3 | 1-238-238-11 | RES, ADJ, CERMET 22K | |
| RV4 | 1-238-238-11 | RES, ADJ, CERMET 22K | |
| ***** | | | |
| * | 1-650-815-11 | S-END BOARD | |
| ***** | | | |
| < TRANSISTOR > | | | |
| Q950 | 1-808-957-11 | PHOTO SENSOR | |
| ***** | | | |
| * | 1-650-797-11 | SBM SW BOARD | |
| ***** | | | |
| < CONNECTOR > | | | |
| * CN659 | 1-564-337-00 | PIN, CONNECTOR 3P | |
| < SWITCH > | | | |
| S652 | 1-554-118-00 | SWITCH, PUSH (1 KEY) (EMPHASIS) | |
| S653 | 1-554-118-00 | SWITCH, PUSH (1 KEY) (SBM) | |
| ***** | | | |
| * | 1-650-812-11 | T-END BOARD | |
| ***** | | | |
| < TRANSISTOR > | | | |
| Q951 | 1-808-957-11 | PHOTO SENSOR | |
| ***** | | | |
| MISCELLANEOUS | | | |
| ***** | | | |
| 110 | 1-751-976-11 | WIRE (FLAT TYPE) (17 CORE) | |
| * 112 | 1-533-293-11 | FUSE HOLDER | |
| 122 | 1-751-977-11 | WIRE (FLAT TYPE) (23 CORE) | |
| △129 | 1-559-479-11 | CORD, POWER (US) | |
| △129 | 1-575-912-11 | CORD, POWER (AEP, G) | |
| BAT601 | 1-528-229-11 | BATTERY, LITHIUM CR-2450 | |
| FL601 | 1-517-271-11 | INDICATOR TUBE, FLUORESCENT | |

| Ref.No. | Part No. | Description | Remark |
|---------------------------------|--------------|--|--------|
| FL651 | 1-517-272-11 | INDICATOR TUBE, FLUORESCENT | |
| △F901 | 1-532-286-00 | FUSE, TIME-LAG (2.5A, 250V) (AEP, G) | |
| △F901 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| △F902 | 1-532-286-00 | FUSE, TIME-LAG (2.5A, 250V) (AEP, G) | |
| △F902 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| △F903 | 1-532-744-11 | FUSE, GLASS TUBE (2.5A, 125V) (US) | |
| M901 | A-2004-301-A | MOTOR ASSY, CONTROL (LOADING) | |
| M902 | 8-835-306-01 | MOTOR, DC U-17A (CAPSTAN) | |
| * M903 | 8-835-205-01 | MOTOR, DC U-2A (REEL) (included PM901) | |
| M904 | 8-848-549-11 | DRUM ASSY (DOU-15A-R) (AEP, US) | |
| M904 | 8-848-626-01 | DRUM ASSY (DOU-03D-R) (G) | |
| M905 | A-2003-910-A | MOTOR ASSY, CASSETTE | |
| PM902 | 1-454-522-11 | SOLENOID, PLUNGER (FWD) | |
| △T901 | 1-426-719-11 | TRANSFORMER, POWER (AEP, G) | |
| △T901 | 1-426-796-11 | TRANSFORMER, POWER (US) | |
| ***** | | | |
| ACCESSORIES & PACKING MATERIALS | | | |
| ***** | | | |
| | 1-467-482-11 | REMOTE COMMANDER (RM-D2000) (GOLD) | |
| | 1-467-482-21 | REMOTE COMMANDER (RM-D2100) (BLACK) | |
| | 1-558-271-11 | CORD, CONNECTION (2 PHONO PLUGS TO 2 PHONO PLUGS) | |
| * | 3-356-965-01 | SPACER (US) | |
| | 3-707-584-01 | COVER, BATTERY (for RM-D2100) (BLACK) | |
| | 3-707-584-11 | COVER, BATTERY (for RM-D2000) (GOLD) | |
| | 3-757-928-11 | MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH) (AEP) | |
| | 3-757-928-21 | MANUAL, INSTRUCTION (ENGLISH) (US) | |
| | 3-757-928-41 | MANUAL, INSTRUCTION (GERMAN, SWEDISH, DUTCH, ITALIAN) (AEP) | |
| | 3-757-928-51 | MANUAL, INSTRUCTION (GERMAN) (G) | |
| * | 3-907-557-01 | INDIVIDUAL CARTON | |
| * | 3-907-558-01 | CUSHION | |
| | 4-847-802-00 | SCREW (AEP, G) | |
| | 3-757-928-31 | MANUAL, INSTRUCTION (FRENCH) (AEP) | |
| ***** | | | |
| ***** | | | |
| HARDWARE LIST | | | |
| ***** | | | |
| #1 | 7-621-772-08 | SCREW +B 2X3 | |
| #2 | 7-621-772-20 | SCREW +B 2X5 | |
| #3 | 7-621-772-30 | SCREW +B 2X6 | |
| #4 | 7-628-253-05 | SCREW +PS 2X4 | |
| #5 | 7-627-553-27 | SCREW, PRECISION +P 2X2.5 | |
| #6 | 7-627-553-67 | SCREW, PRECISION +P 2X5 | |
| #7 | 7-621-775-08 | SCREW +B 2.6X3 | |
| #8 | 7-627-450-78 | SCREW, PRECISION +K 1.7X4 (AEP, US) | |
| #8 | 7-627-852-48 | PRECISION SCREW +P1.7X3.5TYPE3 (G) | |

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

DTC-2000ES

| <u>Ref.No.</u> | <u>Part No.</u> | <u>Description</u> | <u>Remark</u> |
|----------------|-----------------|---------------------------------|---------------|
| #9 | 7-627-552-47 | SCREW, PRECISION +P 1.7X4 | |
| #10 | 7-621-773-86 | SCREW +B 2.6X4 | |
| #11 | 7-685-884-09 | SCREW +BVTT 4X14 (S) | |
| #12 | 7-685-870-01 | SCREW +BVTT 3X5 (S) | |
| #13 | 7-682-546-09 | SCREW +B 3X5 | |
| #14 | 7-682-547-09 | SCREW +BVTT 3X6 (S) | |
| #15 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S | |
| #16 | 7-682-947-01 | SCREW +PSW 3X6 | |
| #17 | 7-685-133-19 | SCREW +BTP 2.6X6 TYPE2 N-S | |
| #18 | 7-621-772-18 | SCREW +B 2X4 | |
| #19 | 7-685-534-19 | SCREW +BTP 2.6X8 TYPE2 N-S | |
| #20 | 7-682-550-09 | SCREW +B 3X12 | |
| #21 | 7-621-255-10 | SCREW +P 2X3 | |
| #22 | 7-627-556-17 | SCREW, PRECISION +P 2.6X3 TYPE1 | |
| #23 | 7-685-102-19 | SCREW +P 2X4 TYPE2 NON-SLIT | |
| #24 | 7-627-553-38 | SCREW, PRECISION +P 2X3 (G) | |