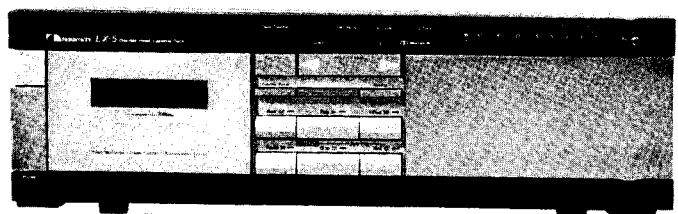




# Service Manual

# Nakamichi LX-5

Discrete Head Cassette Deck



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# 1. GENERAL

## 1.1. Control Functions

The Nakamichi LX-5 control functions are shown below:

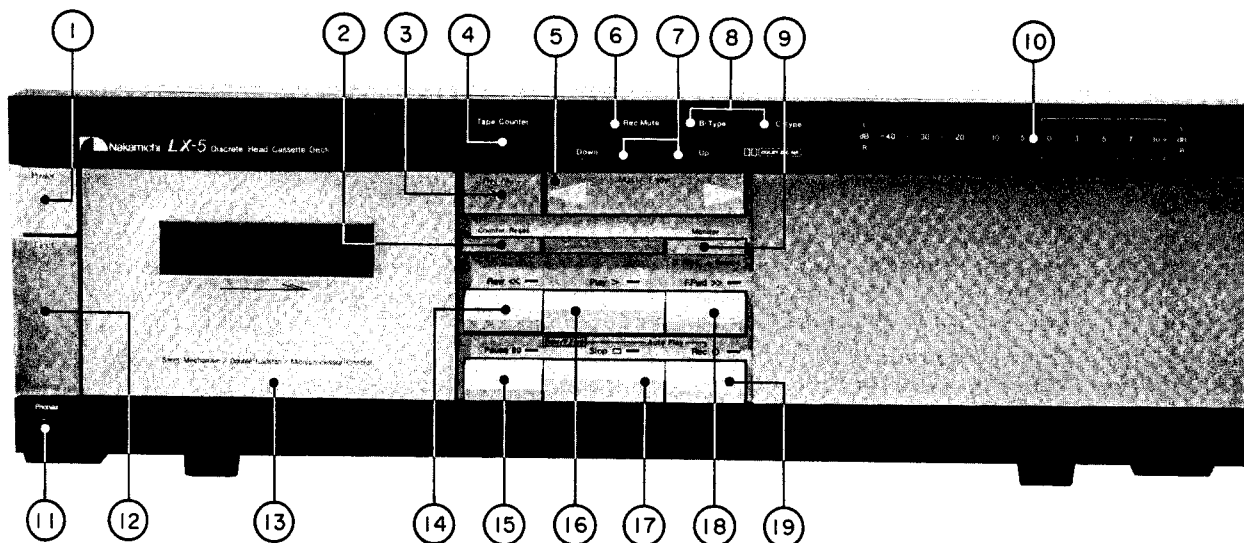


Fig. 1.1 Front View

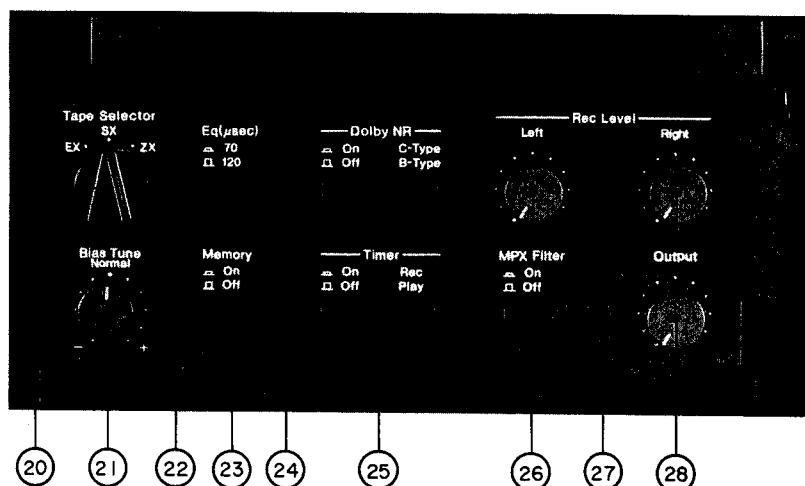


Fig. 1.2 Front View (Hinged Panel Opened)

- |                            |                              |
|----------------------------|------------------------------|
| 1. Power Switch            | 15. Pause Button             |
| 2. Counter Reset Button    | 16. Play Button              |
| 3. Rec. Mute Button        | 17. Stop Button              |
| 4. Tape Counter            | 18. Fast-Forward Button      |
| 5. Master Fader Control    | 19. Record Button            |
| 6. Rec. Mute Indicator     | 20. Tape Selector Switch     |
| 7. Master Fader Indicators | 21. Bias Tune Control        |
| 8. Dolby NR Indicators     | 22. Eq. Switch               |
| 9. Monitor Switch          | 23. Tape Start Memory Switch |
| 10. Peak Level Meters      | 24. Dolby NR Switch          |
| 11. Headphone Jack         | 25. Timer Switch             |
| 12. Eject Button           | 26. MPX Filter Switch        |
| 13. Cassette Holder        | 27. Input Level Controls     |
| 14. Rewind Button          | 28. Output Level Control     |

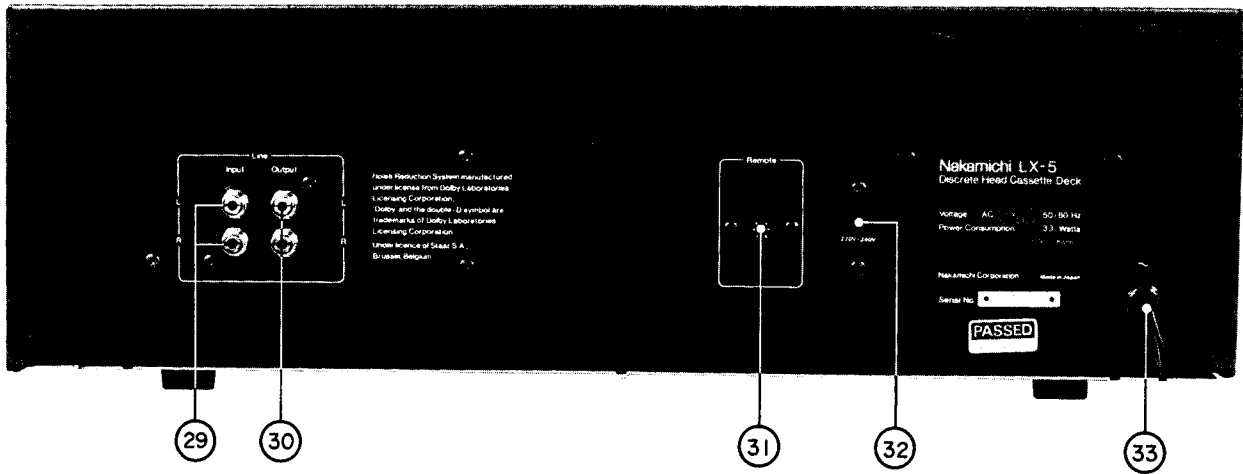


Fig. 1.3 Rear View

- 29. Input Jacks
- 30. Output Jacks
- 31. Remote Control Jack
- 32. Voltage Selector
- 33. Power Cord

### 1.2. Voltage Selector

Voltage selector is installed on the rear panel for Other Version of the Nakamichi LX-5. This voltage selector can select either 120 V or 220-240 V at customer's disposal.

## 2. REMOVAL PROCEDURES

### 2.1. Top Cover Ass'y

Refer to Fig. 2.1.

- (1) Remove F01 and F02, then disassemble F03 (Top Cover Ass'y).

### 2.2. Bottom Cover Ass'y

Refer to Fig. 2.1.

- (1) Remove F04, then disassemble F05 (Bottom Cover Ass'y).

### 2.3. Cassette Case Cover Ass'y

Refer to Fig. 2.1.

- (1) Push the Eject Button to open the Cassette Case Ass'y.
- (2) Pull out F06 (Cassette Case Cover Ass'y) upwardly.

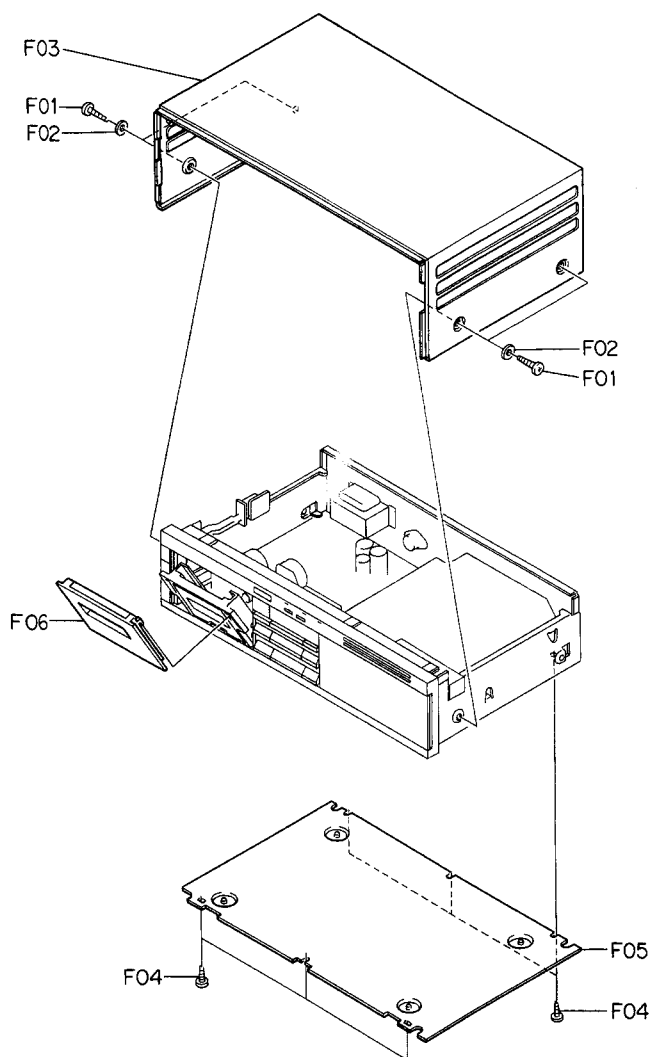


Fig. 2.1

### 2.4. Front Panel Ass'y

Refer to Fig. 2.2.

- (1) Refer to Fig. 2.1. Remove Top Cover Ass'y and Bottom Cover Ass'y referring to items 2.1 and 2.2.
- (2) Pull out F01 (Volume Knobs) and remove F02, then disassemble F03 (Front Panel Ass'y including 6 connectors).

### 2.5. Mechanism Ass'y

Refer to Fig. 2.2.

- (1) Remove Front Panel Ass'y referring to item 2.4.
- (2) Remove F04, then disassemble F05 (Power Switch P.C.B. Ass'y).
- (3) Remove F06 (Power Switch Joint Bar) by releasing the self-interlocking pin of Power Switch Joint Bar from F07 (Power Switch P.C.B. Ass'y).
- (4) Refer to Bottom View A. Remove F08, then turn F09 (Dolby NR P.C.B. Ass'y) over as an arrow head.
- (5) Remove F10, F11 and F12, then disassemble F13 (Mechanism Ass'y including 5 connectors).

### 2.6. Headphone Jack Ass'y

- (1) Remove F14, then disassemble F15 (Headphone Jack Ass'y).
- (2) Remove F16 and F17, then disassemble F18 (Headphone Jack).

### 2.7. Logic & Power P.C.B. Ass'y

Refer to Fig. 2.3.

- (1) Refer to Fig. 2.1. Remove Top Cover Ass'y and Bottom Cover Ass'y referring to items 2.1 and 2.2.
- (2) Remove 7 connectors and the wires connected by wrapping from F02 (Logic & Power P.C.B. Ass'y).
- (3) Remove F01, then disassemble F02 (Logic & Power P.C.B. Ass'y).

### 2.8. Dolby NR P.C.B. Ass'y

Refer to Fig. 2.3.

- (1) Refer to Fig. 2.1. Remove Top Cover Ass'y and Bottom Cover Ass'y referring to items 2.1 and 2.2.
- (2) Remove the wires connected by wrapping from F04 (Dolby NR P.C.B. Ass'y).
- (3) Remove F03, then disassemble F04 (Dolby NR P.C.B. Ass'y) by releasing the self-interlocking pin of the P.C.B. Supporters.

### 2.9. Main P.C.B. Ass'y and Amp. Switch P.C.B. Ass'y

Refer to Fig. 2.3.

- (1) Refer to Fig. 2.2. Remove Front Panel Ass'y referring to item 2.4.
- (2) Remove F05, then disassemble F06 (Amp. Shield Cover Plate).
- (3) Pull out F07 (Selector Knob) and F08 (Switch Knobs).
- (4) Remove F09 and F10, then disassemble F11 (Main P.C.B. Ass'y and Amp. Switch P.C.B. Ass'y).

- (5) Remove F12, F13 and F14, then disassemble F15 (Main P.C.B. Ass'y).
- (6) Remove F16, F17 and F18, then disassemble F19 (Amp. Switch P.C.B. Ass'y).

**2.10. Monitor Switch P.C.B. Ass'y**

Refer to Fig. 2.3.

- (1) Refer to Fig. 2.2. Remove Front Panel Ass'y referring to item 2.4.
- (2) Remove F20, then disassemble F21 (Monitor Switch Shield Cover).
- (3) Remove F22 and F23, then disassemble F24 (Monitor Switch P.C.B. Ass'y).

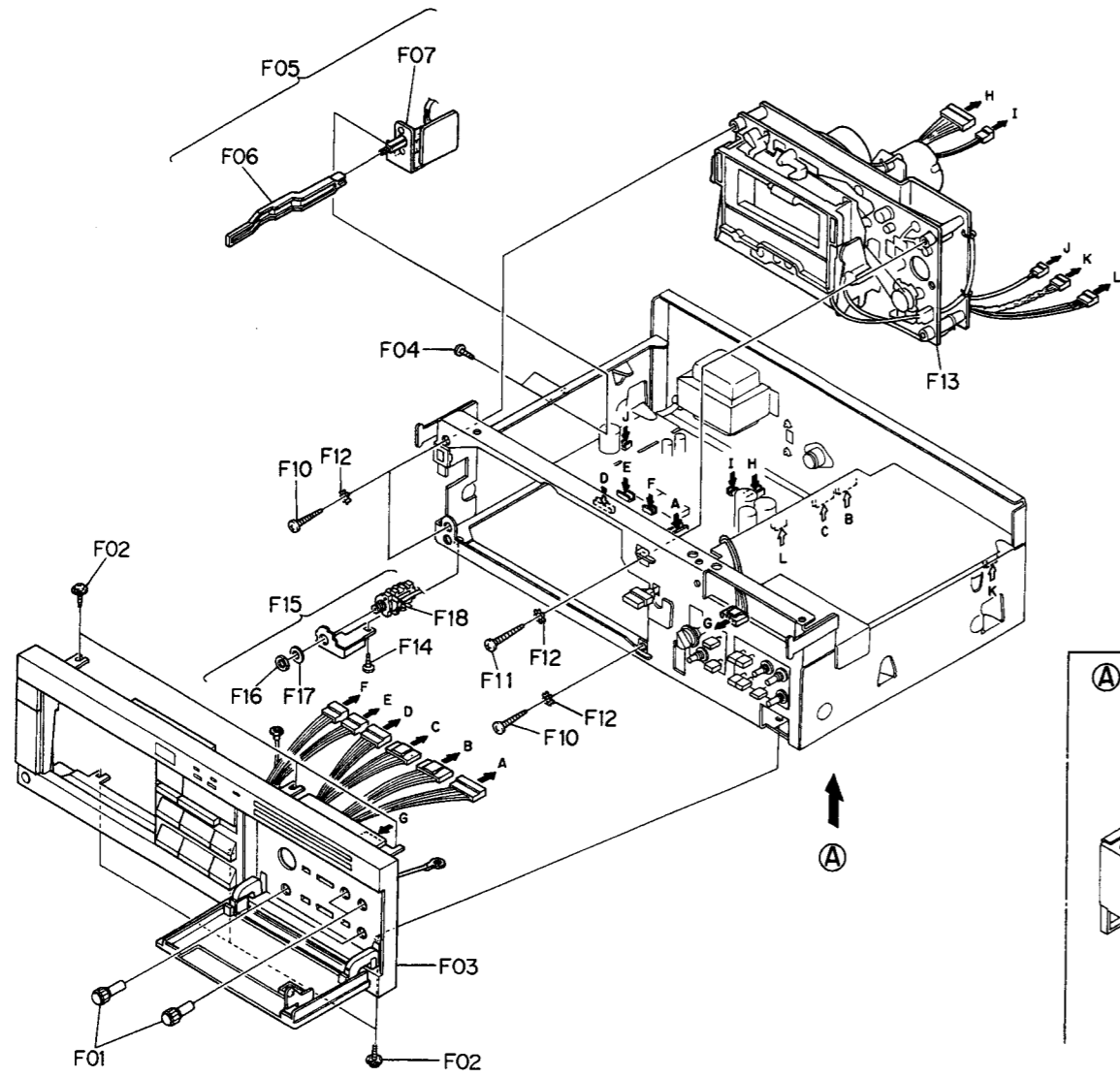


Fig. 2.2

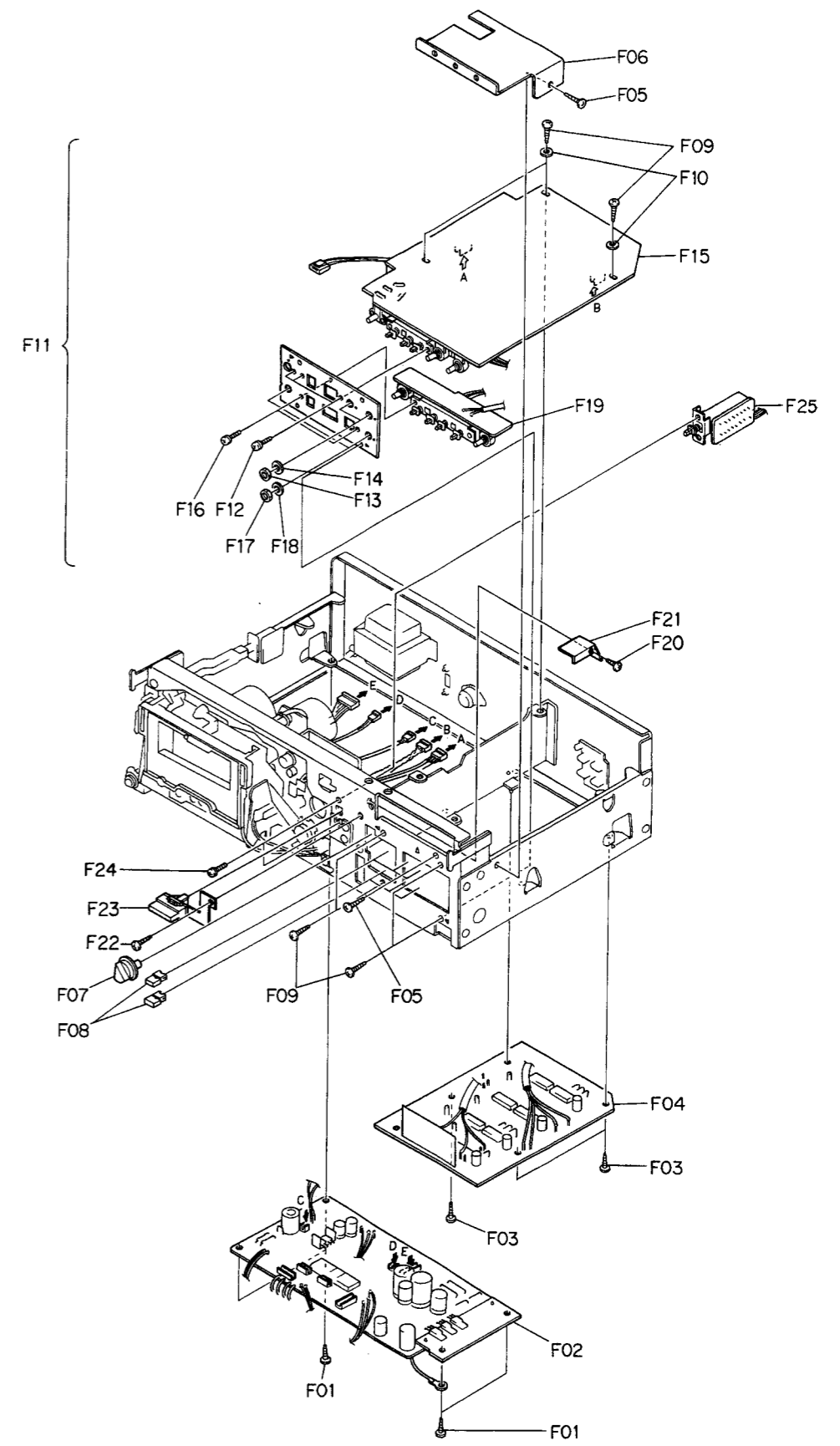
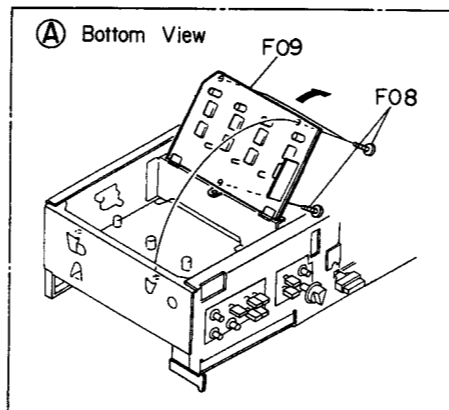


Fig. 2.3

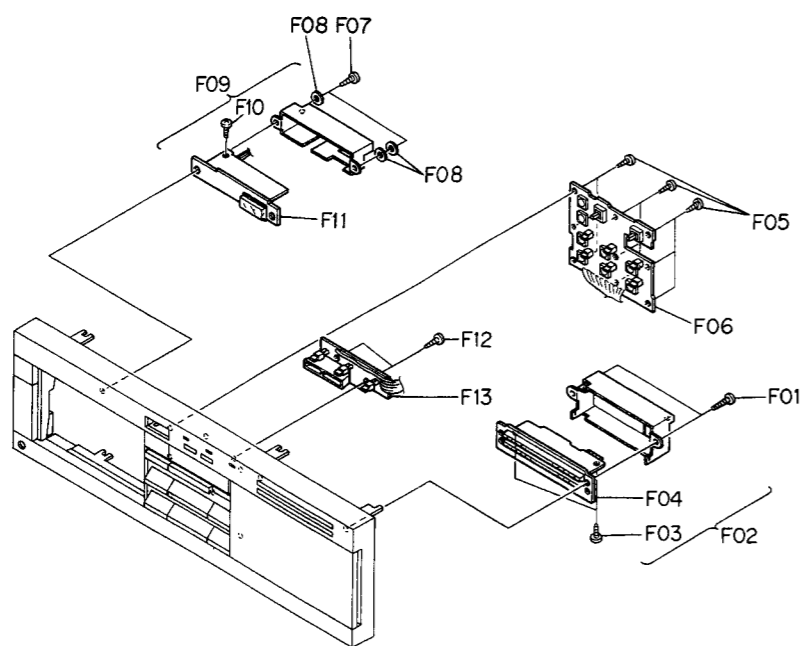


Fig. 2.4

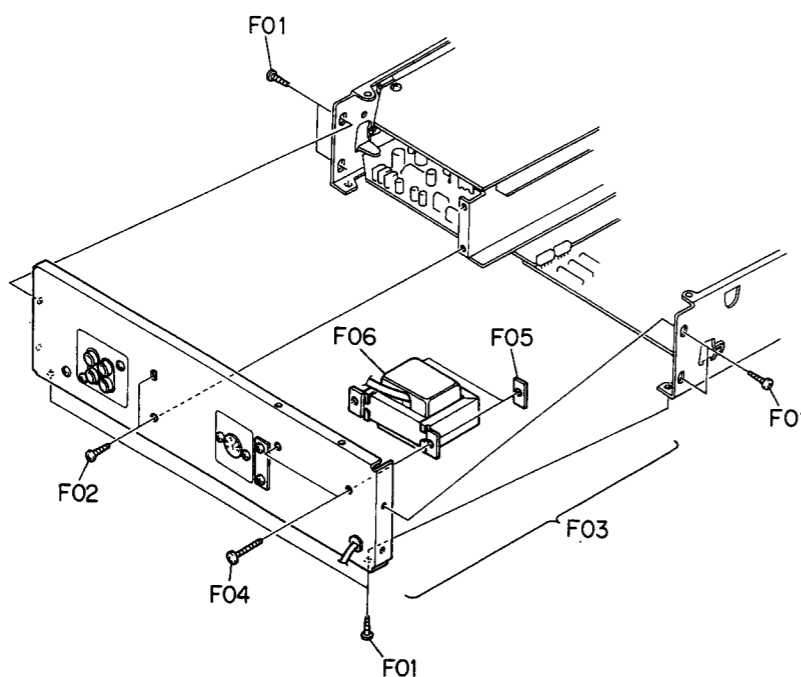


Fig. 2.5

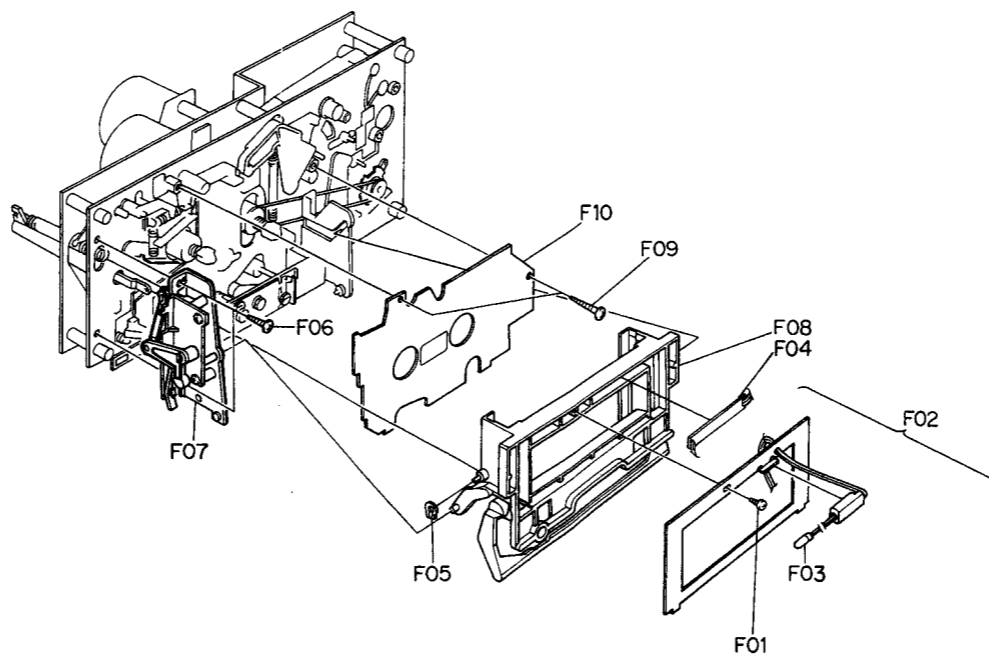


Fig. 2.6

**2.11. LED Level Indicator Ass'y, Control Switch P.C.B. Ass'y, Counter P.C.B. Ass'y and LED P.C.B. Ass'y**  
Refer to Fig. 2.4.

- (1) Refer to Fig. 2.2. Remove Front Panel Ass'y referring to item 2.4.
- (2) Remove F01, then disassemble F02 (LED Level Indicator Ass'y).
- (3) Remove F03, then disassemble F04 (Indicator P.C.B. Ass'y).
- (4) Remove F05, then disassemble F06 (Control Switch P.C.B. Ass'y).
- (5) Remove F07 and F08, then disassemble F09 (Counter P.C.B. Ass'y).
- (6) Remove F10, then disassemble F11 (Counter-1 P.C.B. Ass'y and Counter-2 P.C.B. Ass'y).
- (7) Remove F12, then disassemble F13 (LED P.C.B. Ass'y).

**2.12. Rear Panel Ass'y**

Refer to Fig. 2.5.

- (1) Refer to Fig. 2.1. Remove Top Cover Ass'y and Bottom Cover Ass'y referring to items 2.1 and 2.2.
- (2) Remove F01 and F02, then disassemble F03 (Rear Panel Ass'y).

**2.13. Power Transformer**

Refer to Fig. 2.5.

- (1) Refer to Fig. 2.1. Remove Top Cover Ass'y and Bottom Cover Ass'y referring to items 2.1 and 2.2.
- (2) Remove F04 and F05, then disassemble F06 (Power Transformer).

**2.14. Cassette Case Ass'y and Cover Plate Ass'y**

Refer to Fig. 2.6.

- (1) Refer to Fig. 2.2. Remove Mechanism Ass'y referring to item 2.5.
- (2) Remove F01, then disassemble F02 (Cassette Case Plate Ass'y).
- (3) Remove F03 (Cassette Case Lamp) from Cassette Case Plate, then pull out F04 (Lamp P.C.B.) from F08 (Cassette Case Ass'y).
- (4) Push the Eject Button to open the Cassette Case Ass'y.
- (5) Remove F05 and F06, then disassemble F07 (Cassette Case Holder L Ass'y) by releasing the self-interlocking pin of Damper Lock Arm and F08 (Cassette Case Ass'y).
- (6) Remove F09, then disassemble F10 (Cover Plate Ass'y).

**2.15. Capstan Motor Ass'y and Flywheel Ass'y**

Refer to Fig. 2.7.

- (1) Refer to Fig. 2.2. Remove Mechanism Ass'y referring to item 2.5.
- (2) Remove F01, F02 and F03, then disassemble F04 (Flywheel Holder Ass'y) and F05 (Capstan Belt).
- (3) Remove F06, then disassemble F07 (Capstan Motor Ass'y).
- (4) Remove F08, then disassemble F09 (3P Lug Terminal).
- (5) Remove F10 (Supply Flywheel Ass'y), then disassemble F11 (Take-up Flywheel Ass'y).
- (6) After removing both Flywheel Assemblies, disassemble F12 (Thrust Washer 3mm), F13 (Thrust Washer 2.6mm), F14 (Flange Thrust Cap) and F15 (Flange Thrust Spring).

**2.16. Sub Mechanism Chassis Ass'y**

Refer to Fig. 2.8.

- (1) Refer to Fig. 2.7. Remove Flywheel Holder Ass'y referring to item 2.15.
- (2) Remove F01, F02 and F03, then disassemble F04 (Sub Mechanism Chassis Ass'y).

**2.17. Control Motor Ass'y and Reel Motor Ass'y**

Refer to Fig. 2.8.

- (1) Remove Sub Mechanism Chassis Ass'y referring to item 2.16.
- (2) Remove F05, then disassemble F06 (Control Motor Ass'y).
- (3) Remove F07, then disassemble F08 (Reel Motor Ass'y).



### 2.18. Cam Control Volume

Refer to Fig. 2.8.

- (1) Remove Sub Mechanism Chassis Ass'y referring to item 2.16.
- (2) Remove F09, then disassemble F10 (Volume Coupler).
- (3) Remove F11 and F12, then disassemble F13 (Cam Control Volume).

### 2.19. Reel Hub Ass'y and Idler Ass'y

Refer to Fig. 2.8.

- (1) Remove Sub Mechanism Chassis Ass'y referring to item 2.16.
- (2) Remove F14 (Reel Hub Head), then disassemble F15

(Reel Hub B Ass'y), F16 (Reel Hub Take-up Ass'y), F17 (Reel Hub Supply Ass'y), F18 (Back Tension Ass'y) and F19 (Back Tension Spring).

- (3) Remove F20, then disassemble F21 (Idler Ass'y).

### 2.20. Cam Drive Gear and Control Cam

Refer to Fig. 2.8.

- (1) Remove Sub Mechanism Chassis Ass'y referring to item 2.16.
- (2) Remove F22, then disassemble F23 (Cam Drive Gear).
- (3) Remove F24, then disassemble F25 (Counter-Load Arm Ass'y).
- (4) Remove F26, then disassemble F27 (Control Cam).

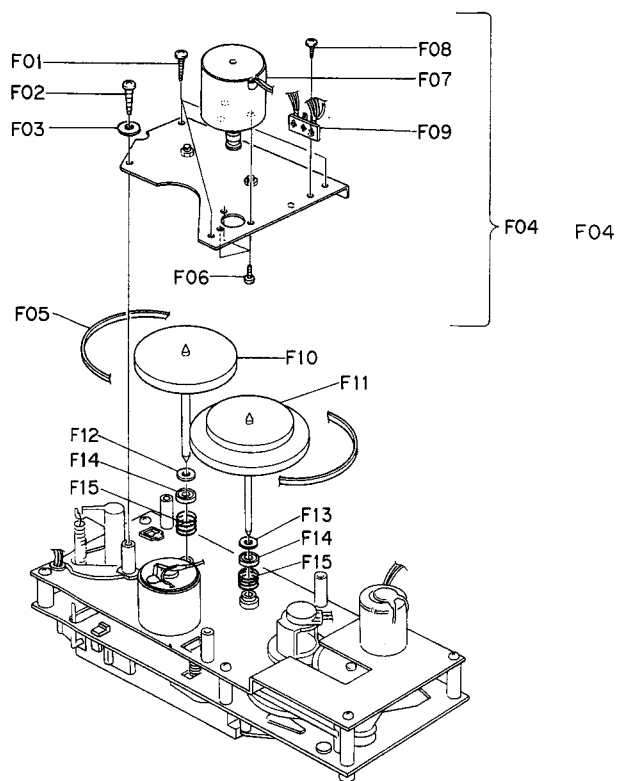


Fig. 2.7

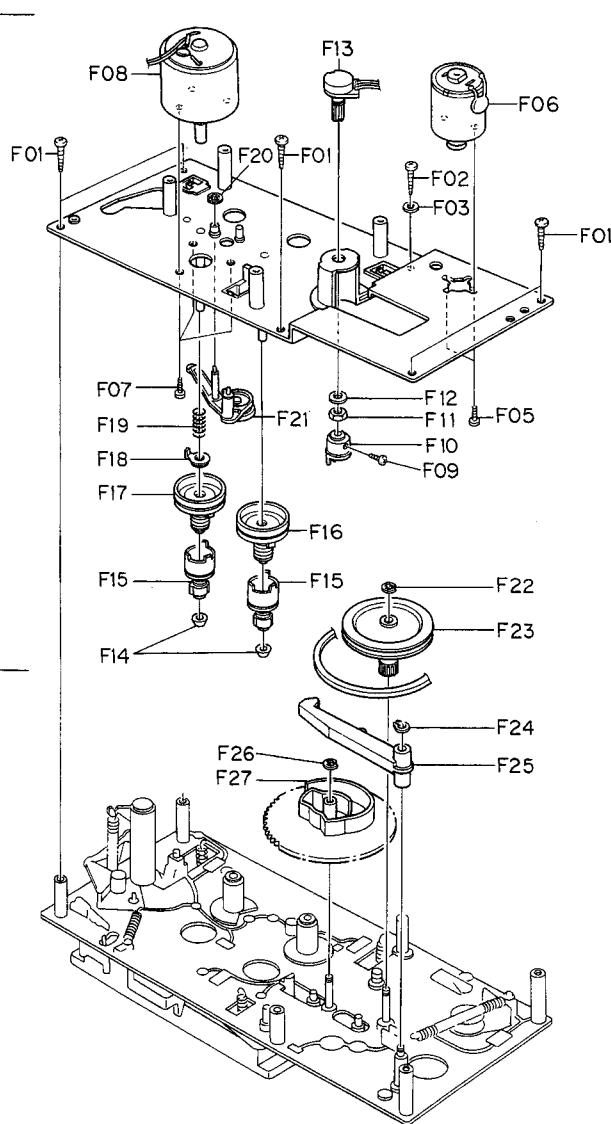


Fig. 2.8

### 2.21. Head Mount Base Ass'y

Refer to Fig. 2.9.

- (1) Refer to Fig. 2.6. Remove Cassette Case Ass'y referring to item 2.14.
- (2) Remove F01, then disassemble F02 (Head Mount Base Ass'y).

### 2.22. Erase Head, Pressure Roller and Tape Guide

Refer to Fig. 2.9.

- (1) Remove Head Mount Base Ass'y referring to item 2.21.
- (2) Remove F03, then disassemble F04 (Erase Head).
- (3) Remove F05, then disassemble F06 (Supply Pressure Roller).
- (4) Remove F07, then disassemble F08 (Supply Tape Guide).
- (5) Remove F09, then disassemble F10 (Take-up Pressure Roller).
- (6) Remove F11, then disassemble F12 (Take-up Tape Guide).

### 2.23. Playback Head Ass'y and Record Head Ass'y

Refer to Fig. 2.9.

- (1) Remove Head Mount Base Ass'y referring to item 2.21.
- (2) Turn F13 by 90° by pushing it, then disassemble F14 (Playback Head Ass'y).
- (3) Turn F15 by 90° by pushing it, then disassemble F16 (Record Head Ass'y).

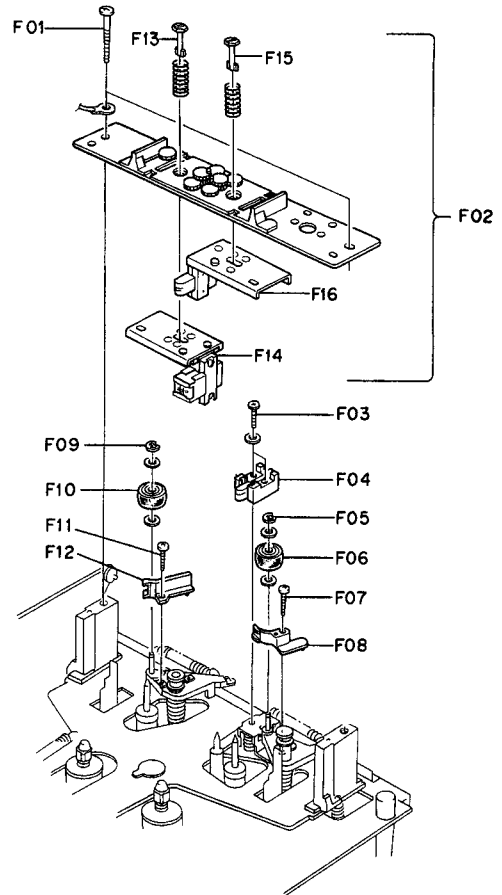


Fig. 2.9

### 3. MEASUREMENT INSTRUMENTS

- (1) Audio Generator (20 Hz – 200 kHz)
- (2) AC Millivolt Meter (with dB measures)
- (3) Oscilloscope (DC – 5 MHz)
- (4) Distortion Meter
- (5) Speed & Wow/Flutter Meter
- (6) Frequency Counter (DC – 1 MHz)
- (7) Ohm Meter
- (8) DC Volt Meter
- (9) AC Volt Meter
- (10) Torque Gauge (DA09013A)
- (11) 15 kHz Azimuth Tape (DA09004A)
- (12) 3 kHz Speed & Wow/Flutter Tape (DA09006A)
- (13) 1 kHz Track Alignment Tape (DA09007A)
- (14) 400 Hz Level Tape (DA09005A)
- (15) 20 kHz PB Frequency Response Tape (DA09001A)
- (16) 15 kHz PB Frequency Response Tape (DA09002A)
- (17) 10 kHz PB Frequency Response Tape (DA09003A)
- (18) Reference EXII Tape (DA09066A)
- (19) Reference SX Tape (DA09025A)
- (20) Reference ZX Tape (DA09037A)
- (21) Tilt Check Gauge M-9039 (DA09039A)
- (22) EH Tilt Check Gauge M-9040 (DA09040A)
- (23) EH Stroke Check Gauge M-9051 (DA09051A)
- (24) Stroke Check Gauge M-9047 (DA09047B)
- (25) Record Head Mounting Gauge M-9048 (DA09048A)
- (26) Back Tension Gauge (DA09055A)
- (27) Tension Arm Adjustment Cassette (DA09056A)
- (28) Audio Analyzer T-100  
(including Distortion, Wow/Flutter, Speed,  
Oscillator and dB meters)

Note: (10) – (28) are the products of Nakamichi Corporation.

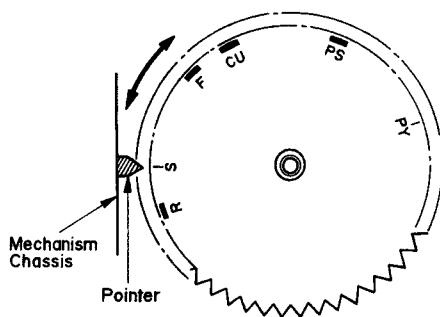


Fig. 4.1

### 4. MECHANICAL ADJUSTMENTS

#### 4.1. Mechanism Control Cam Adjustment

Before adjustment, disassemble the Front Panel Ass'y, then remove the Cover Plate referring to items 2.4 and 2.14.

##### (1) Offset Adjustment of Control Motor Driver

- (a) Refer to Figs. 4.1 and 4.2.  
Adjust VR602 and VR603 on the Logic & Power P.C.B. Ass'y to locate approximately at the middle of the variable range. Then turn ON the Power switch.  
VR602 (for Cam position stop)  
VR603 (for Cam position play)
- (b) Press the Stop button to set the LX-5 in Stop mode. Adjust VR602 (for stop) so that the "S" mark on the Cam corresponds to the pointer on the mechanism chassis.
- (c) Press the Play button to set the LX-5 in Playback mode. (Cam will rotate, and the position marked with "PY" comes to the pointer.) Adjust VR603 (for play) so that the "PY" mark on the Cam corresponds to the pointer.
- (d) Repeat above (b) and (c) 2 – 3 times so that the "S" and "PY" marks on the Cam correspond to the pointer accurately in Stop and Playback modes respectively.  
(This adjustment is required because the position adjusted by one volume will be slightly changed when the other volume is adjusted.)
- (e) Set the LX-5 in F.F. or Pause mode by pressing each button and check to insure that the pointer is in a range of "F" or "PS" mark respectively.
- (f) If out of the range, precise adjustment for each position according to "(2) Offset Fine Adjustment of Control Motor Driver" will be required.

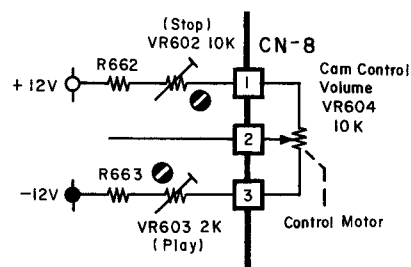


Fig. 4.2

## (2) Offset Fine Adjustment of Control Motor Driver

Adjust only if a satisfactory result is not obtained in "(1) Offset Adjustment of Control Motor Driver". This adjustment is made by changing the value of the fixed resistors on the Logic & Power P.C.B. Ass'y.

Note: The value of voltage is typical value.

### (a) Observation Point of Reference Voltage

Observe the each voltage at the sliding contact of the Cam Control Volume VR604 (10 kΩ) in Stop, Fast (F.F. or Rew.), Pause and Playback modes.

### (b) Reference Voltage

Reference voltage at the sliding contact of VR604 (Cam Control Volume) in each mode is as follows:

Mode	Reference Voltage (Typical Value)
Stop	0 V
Fast (F.F./Rew.)	-2.0 V ±0.25 V
Pause	-6.5 V
Play	-9.1 V

### (c) Resistors for Adjustment

Mode	Ref. No.	Typical Value
Fast (F.F./Rew.)	R647	22 kΩ
Pause	R649	76.8 kΩ (F)
Play	R648	10 kΩ

### (d) Adjustment Procedures

- Set the LX-5 in Stop mode, then check to insure that the voltage at the sliding contact of VR604 is 0 V (±0.3 V).
- Set the LX-5 in F.F. mode, then adjust the value of R647 so that the voltage at the sliding contact of VR604 will become lower by 2.0 V (±0.25 V) than in Stop mode.
- Press the Pause button to set the LX-5 in Pause mode. Adjust the value of R649 to obtain -6.5 V (+0.4, -0.15 V) at the sliding contact of VR604.
- Set the LX-5 in Playback mode, then adjust the value of R648 so that the voltage at the sliding contact of VR604 will become lower by 2.6 V (±0.4 V) than in Pause mode.

## 4.2. Reel Motor Speed Adjustment in Play Mode

Refer to Fig. 4.3.

- Connect a DC voltmeter to TP1 and GND on the Logic & Power P.C.B. Ass'y.
- Without loading a cassette tape, set the LX-5 in Play mode.
- Adjust VR601 on the Logic & Power P.C.B. Ass'y to obtain -4 V on the DC voltmeter.

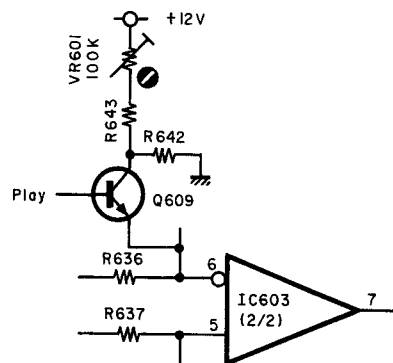


Fig. 4.3

## 4.3. Record Head and Playback Head Tilt Adjustment

Note: On items 4.3 — 4.9, refer to Fig. 4.4 flow chart.

Refer to Figs. 4.5 and 4.6.

- Load a Tilt Check Gauge M-9039 (DA09039A) in the LX-5.
- Clip the grounding terminal of the Tilt Check Gauge with one end of the cord with clip, and the chassis of the LX-5 with the other end.
- Remove both of the Height Gears.
- Set the LX-5 in Play mode. Check to insure whether the Beacons Playback Head "Upper" or "Lower" and Record Head "Upper" or "Lower" are illuminating. In order not to give damages onto the head surfaces, push both of slide knobs of the Gauge to the direction of arrow marks, then return them to the original place to be in contact with record head and playback head surfaces after Play mode is securely locked.
- Check to insure freedom from contact between the Gauge and pad lifter.
- Beacon Playback Head "Lower" will light on when height adjustment screw (P) turned clockwise but Playback Head "Upper" when counterclockwise. Adjust so that both "Upper" and "Lower" will light on even when you move the slide knob to the direction of an arrow mark and then return them to the original place.
- Same procedures will apply to the Beacons Record Head "Upper" and "Lower", except for the height adjustment screw (R).
- Set the LX-5 in Stop mode and fit both of the serrated Height Gears. Then set the LX-5 again in Play mode and insure all of the 4 Beacons are illuminating. If not, (3) through (7) will have to be repeated till satisfactory results are obtained.

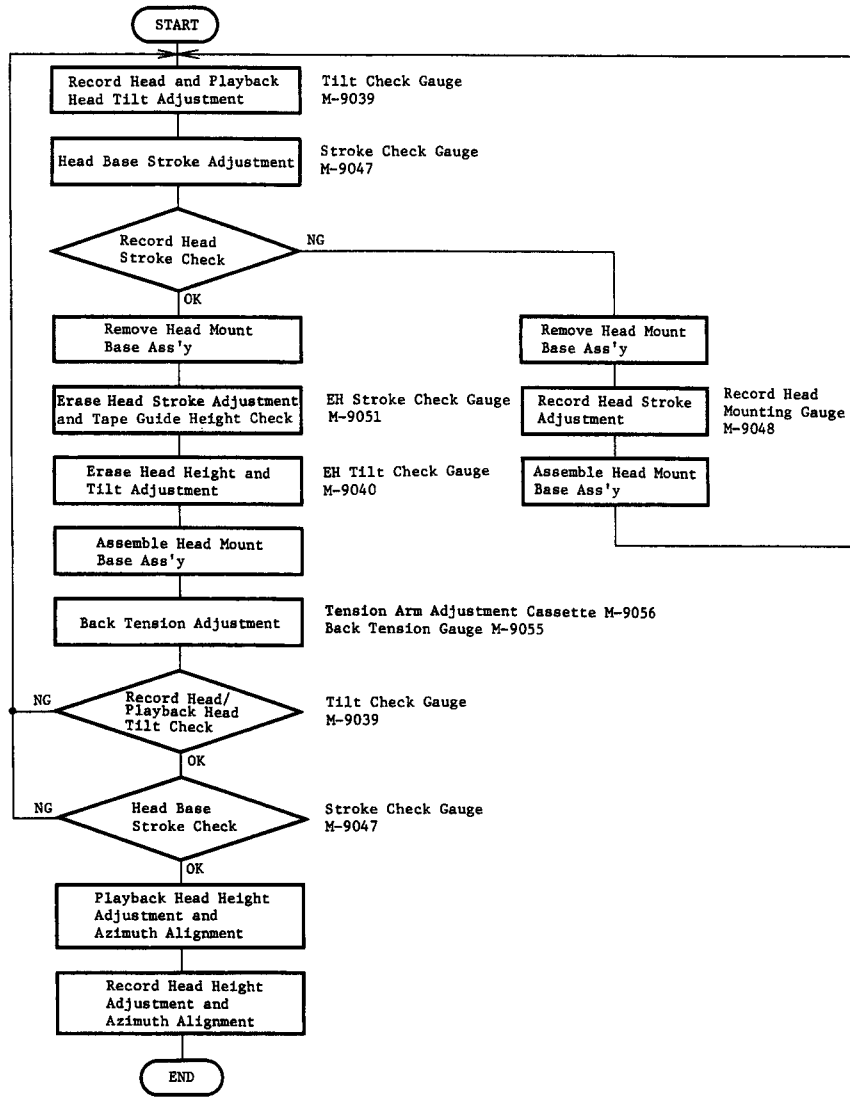


Fig. 4.4

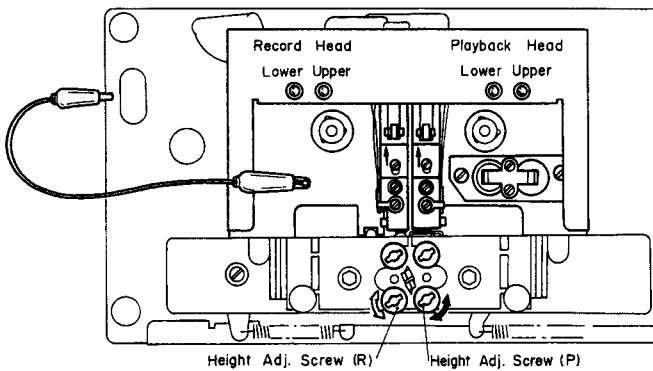


Fig. 4.5

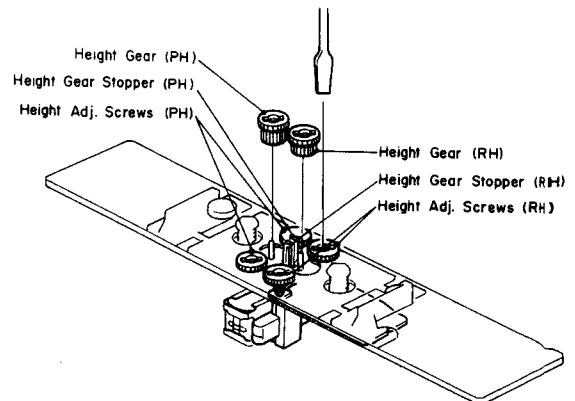


Fig. 4.6

#### 4.4. Head Base Stroke Adjustment

Note: Before you conduct this adjustment, adjust with a "Tilt Check Gauge" to insure freedom from tilt on the playback head and record head.

Refer to Fig. 4.7.

- (1) Load a Stroke Check Gauge M-9047 (DA09047B) in the LX-5.
- (2) Move Record Head Indicator and Playback Head Indicator to the direction of arrow mark "A" with your finger tip and then set the LX-5 in Play mode. Then slowly release the Indicators and insure whether each of the Indicators is in contact with record and playback heads.
- (3) Check to insure whether the "P" pointer on the Playback Head Indicator locates between the 2 lines on the Indicator Plate.
- (4) If the playback head stroke is noted to be misaligned, adjustment can be made by moving the stroke adjuster assembled in the head base assembly (either forwardly or backwardly).
- (5) Check to insure whether the "P" pointer on the Playback Head Indicator locates between the 2 lines on the Record Head Indicator, thus check can be made on record head stroke.
- (6) If the record head stroke is noted to be misaligned, adjustment can be made with a Record Head Mounting Gauge M-9048 (DA09048A).

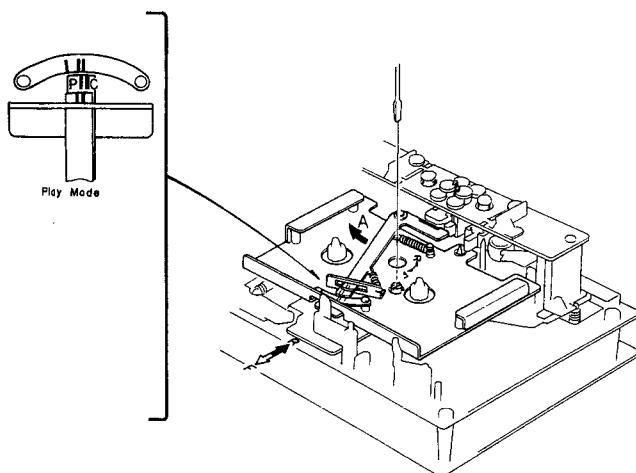


Fig. 4.7

#### 4.5. Erase Head Stroke Adjustment and Tape Guide Height Check

Remove Head Mount Base Ass'y referring to item 2.21. Refer to Figs. 4.8 and 4.9.

##### (1) Erase Head Stroke Adjustment

- (a) Load an EH Stroke Check Gauge M-9051 (DA0-9051A) in the LX-5.
- (b) Set the LX-5 in Play mode, thus check can be made on erase head stroke through the EH Stroke Indicator.
- (c) Check to insure whether the erase head surface is aligned with red line on the EH Stroke Indicator. If not, adjust the erase head stroke by loosening 2 screws A that assemble erase head and erase head plate.
- (d) After completion of adjustment, 2 pcs. of screws shall be locked with lock tight paint.

##### (2) Supply Tape Guide Height Check

- (a) Load an EH Stroke Check Gauge M-9051 (DA0-9051A) in the LX-5.
- (b) Set the LX-5 in Play mode.
- (c) Slide the Supply Tape Guide Check Bar down against the supply tape guide, and check to insure that the Supply Tape Guide Check Bar is accepted by the supply tape guide.

##### (3) Take-up Tape Guide Height Check

- (a) Load an EH Stroke Check Gauge M-9051 (DA0-9051A) in the LX-5.
- (b) Set the LX-5 in Play mode.
- (c) Slide the Take-up Tape Guide Check Bar down against the take-up tape guide, and check to insure that the Take-up Tape Guide Check Bar is accepted by the take-up tape guide.

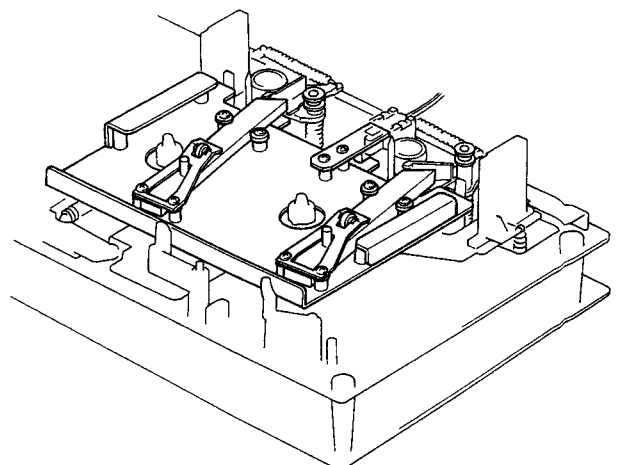


Fig. 4.8

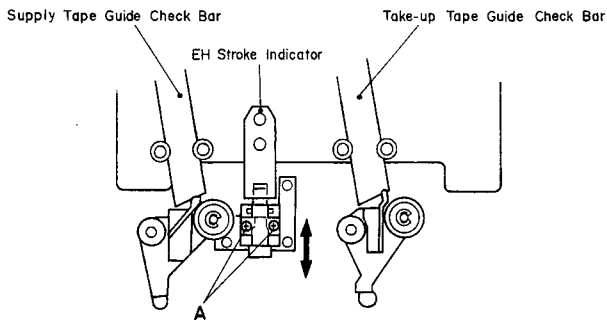


Fig. 4.9

#### 4.6. Erase Head Height and Tilt Adjustment

Refer to Figs. 4.10 and 4.11.

- (1) Remove Head Mount Base Ass'y referring to item 2.21.
- (2) Load an EH Tilt Check Gauge M-9040 (DA09040A) in the LX-5.
- (3) Set the LX-5 in Stop mode.
- (4) Check to insure whether one of the 3 Beacons is illuminating. Look down the mirror as shown by an arrow mark and slowly turn the Screw "Height" counterclockwise (or clockwise) so that the two horizontal lines on the mirror will become superposed on the line (in different color) of the erase head, and check to insure whether Beacon "1" is illuminating.
- (5) Turn Screw "Tilt" counterclockwise (or clockwise) to light on Beacon "2". Excessive turning will cause the Beacon "1" to light off. Adjustments of Screw "Tilt" will therefore be conducted till both of the Beacons "1" and "2" illuminate.
- (6) Turn Screw "Azimuth" counterclockwise (or clockwise) to light on Beacon "3". Excessive turning will cause either Beacon "1" or "2" to light off, and therefore adjust Screw "Azimuth" until all of the 3 Beacons "1", "2" and "3" illuminate.
- (7) Check to insure whether the horizontal line on the mirror corresponds to that on the erase head. If not, (4) through (7) will have to be repeated till satisfactory results are obtained.
- (8) After completion of adjustment, 3 pcs. of screws shall be locked with lock tight paint.

**Note:** Before use of this gauge, check to insure freedom from dust or dirt, or overflow in the groove of the erase head surface.

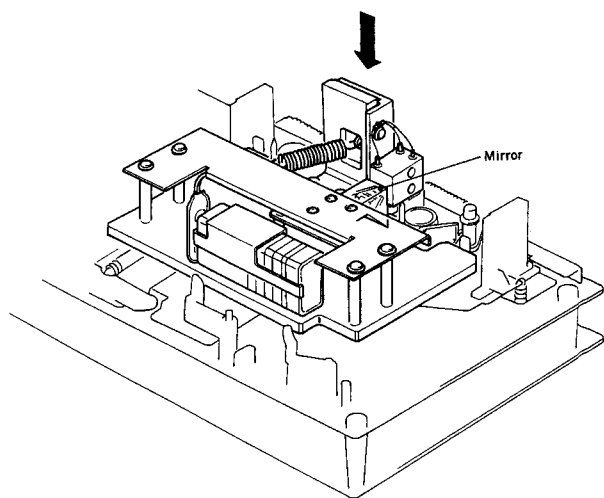


Fig. 4.10

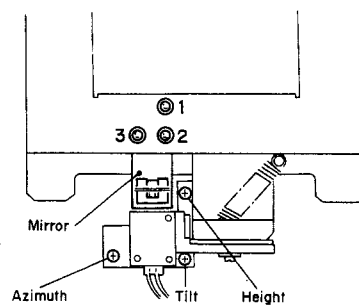


Fig. 4.11

#### 4.7. Back Tension Adjustment

Refer to Figs. 4.12 – 4.14.

- (1) Load a Tension Arm Adjustment Cassette (DA09056A) in the LX-5 referring to Fig. 4.12.
- (2) Set the LX-5 in Play mode.
- (3) Bend the Back Tension Arm with pliers so that the gap between the Cassette Holding Spring assembled on the Head Base Ass'y and the Back Tension Arm becomes 0.5 mm as shown in Fig. 4.13. Do not bend the top of the Back Tension Arm.
- (4) Load the Back Tension Gauge (DA09055A) in the LX-5.
- (5) Set the LX-5 in Play mode and read the torque value of Back Tension Gauge.

If the value is in a range of 6 g-cm to 10 g-cm, adjustment is not necessary. If not, change the installation point of the Back Tension Spring as shown in Fig. 4.14, and obtain the torque of 7 g-cm to 9 g-cm range.

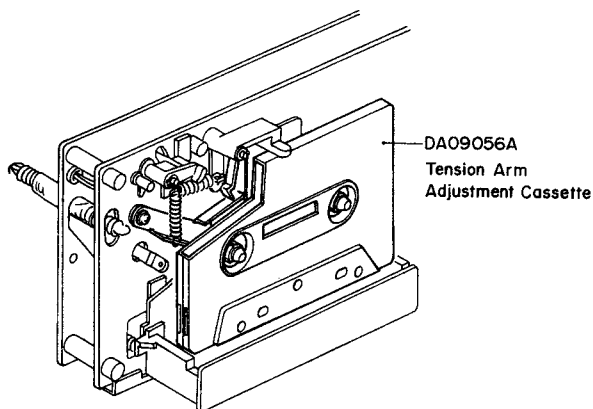


Fig. 4.12

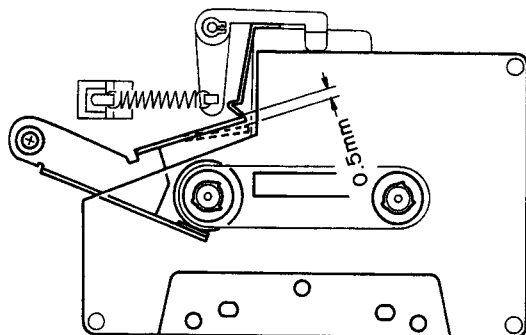


Fig. 4.13

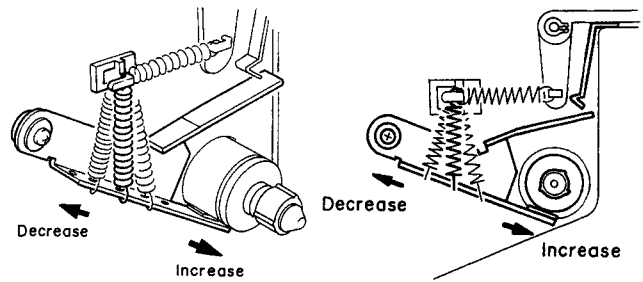


Fig. 4.14

#### 4.8. Playback Head and Record Head Height Adjustment and Azimuth Alignment

##### (1) Playback Head Height Adjustment and Azimuth Alignment

Refer to Fig. 4.15.

- (a) Connect a VTVM to the Output Jacks.
- (b) Set the Monitor switch to Tape and Eq. switch to 70  $\mu$ s.
- (c) Load a 1 kHz Track Alignment Tape (DA09007A), then set the LX-5 in Play mode.
- (d) Turn the PH Height Gear until the outputs of both channels become minimum.
- (e) Load a 15 kHz Azimuth Tape (DA09004A), then set the LX-5 in Play mode.
- (f) Turn the PH Azimuth Alignment Screw until the outputs of both channels become maximum.
- (g) Repeat (c) through (f) one or two times to obtain optimum performance.

##### (2) Record Head Height Adjustment and Azimuth Alignment

Refer to Fig. 4.15.

- (a) Connect a VTVM to the Output Jacks.
- (b) Set the Bias Tune Volume to the center position.
- (c) Set the Monitor switch to Tape, Eq. switch to 70  $\mu$ s, and Tape Selector switch to SX.
- (d) Load a Reference SX Tape (DA09025A), then set the LX-5 in Record and Play mode.
- (e) Feed in 400 Hz (0 dB), then turn the RH Height Gear until the outputs of both channels become maximum.
- (f) Feed in 15 kHz (-20 dB), then turn the RH Azimuth Alignment Screw until the outputs of both channels become maximum.
- (g) Repeat (e) and (f) one or two times to obtain optimum performance.
- (h) After completion of above adjustment, feed in 400 Hz (0 dB) and record it to the same portion of both sides A and B of the tape.
- (i) Immerse the recorded tape in a magnetized developing solution. In turn, check to insure that the recording head tracks across the center are separated with a distance of 0.55 to 0.75 mm (typically 0.65 mm) as illustrated in Fig. 4.16.



Note: Liquid for tape magnetized development solution  
 "MAGNA-SEE, SOUND CRAFT a product of CBS RECORDS a division of Columbia Broadcasting System, Inc., Danbury, Conn. 06810 U.S.A., or equivalent".  
 After development, clean the tape otherwise pressure rollers and heads will become dirty.

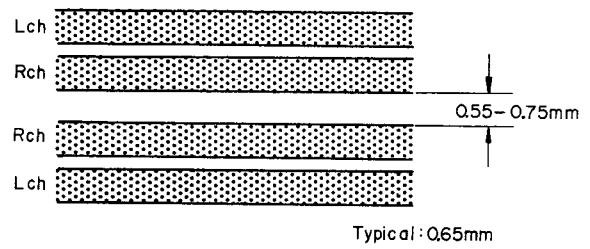


Fig. 4.16

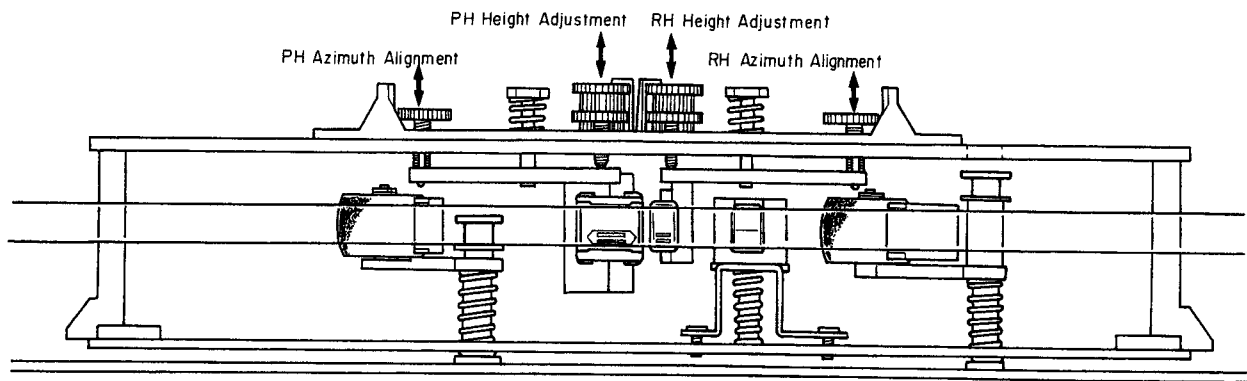


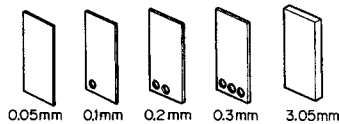
Fig. 4.15

#### 4.9. Record Head Stroke Adjustment

Refer to Figs. 4.17 and 4.18.

Note: This adjustment will be required only to insure freedom from misalignment of the record head stroke in the record head stroke check mode.

- (1) Check the accuracy of the record head stroke.
- (2) Remove Head Mount Base Ass'y referring to item 2.21.
- (3) Remove the record head assembly.
- (4) Adjustment of Record Head Mounting Gauge M-9048 (DA09048A)
  - (a) Mount the Block B onto the Mounting Gauge Plate.
  - (b) Loosen the 2 screws fixing the Block A.
  - (c) As shown in Fig. 4.17, hold the Gauges (3.05 mm and 0.1 mm thickness) between the Block A and Block B, and fix the Block A with screws, pushing the Block A to the 2 guide pins.
- (5) Remove the Block B from the Mounting Gauge Plate.
- (6) As shown in Fig. 4.18, mount the R-8L record head assembly onto the Mounting Gauge Plate, then check the location of the R-8L record head surface. (If record head contacts to the Block C, loosen 2 pcs. of screws that assemble record head and record head plate, then place the R-8L record head assembly onto the Plate.)
- (7) Remove the R-8L record head assembly from the Mounting Gauge Plate.
- (8) Readjustment of Record Head Mounting Gauge M-9048 (DA09048A)
  - (a) Mount the Block B onto the Mounting Gauge Plate.



- (b) Loosen the 2 screws fixing the Block A.
- (c) As shown in Fig. 4.17, hold the Gauges (3.05 mm and either one of 0.05, 0.15, 0.2, 0.25, 0.3 or 0.35 mm thickness) between the Block A and Block B, and fix the Block A with screws, pushing the Block A to the 2 guide pins.
- (9) Remove the Block B from the Mounting Gauge Plate.
- (10) Mount the R-8L record head assembly onto the Mounting Gauge Plate.
- (11) As shown in Fig. 4.18, loosen 2 pcs. of screws that assemble record head and record head plate. As the location of the Block A is secured by the item (8)-(c), push the record head to the directions A and B, then tighten 2 pcs. of screws.
- (12) Check to insure freedom from gap between the Block C and record head surface, then tighten the 2 pcs. of screws on the record head assembly with lock tight paint.
- (13) Remove the R-8L record head assembly from the Mounting Gauge Plate.
- (14) Assemble the record head assembly to the head mount base.
- (15) Assemble the head mount base assembly to the mechanism assembly.
- (16) Check the record head stroke. If the above are inaccurate, items (1) through (16) will have to be repeated till satisfactory results are obtained.

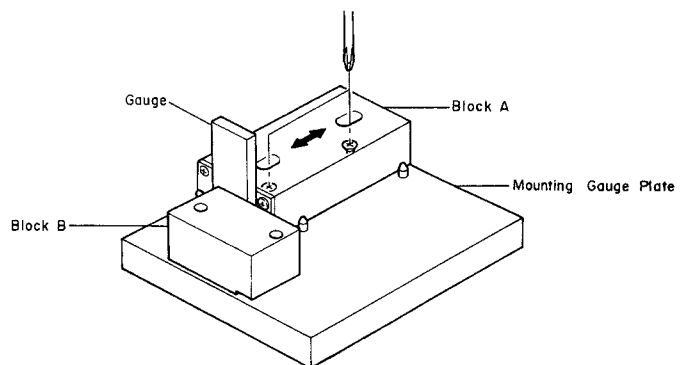


Fig. 4.17

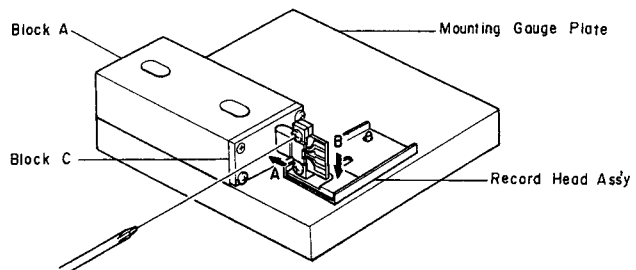


Fig. 4.18

#### 4.10. Tape Travelling Adjustment

The adjustment shall be made with a modified version of the current type EXII C-90 as shown in Fig. 4.19 (error will be made if a current type Tape Travelling Cassette (DA09011A) should be used for this purpose).

While modifying an EXII C-90, the tape guides in the cassette housing shall be kept protected to avoid tilt. Check shall be made in the following procedures:

- (1) An EXII C-90 tape thus modified shall be loaded onto the LX-5.
- (2) Release the back-tension (rotate the Supply Reel and feed out some length of tape) and set the LX-5 in Play mode.
- (3) In this juncture, check to insure whether the tape is free from waving or slippage from the tape guide.
- (4) When the modified EXII C-90 is played back, check to insure whether the tape is freedom from waving from head surface or at pressure rollers.
- (5) If either of waving or slippage from the tape guide should be noted, adjustments of "4.3. Record Head and Playback Head Tilt Adjustment", "4.4. Head Base Stroke Adjustment", "4.5. Erase Head Stroke Adjustment and Tape Guide Height Check", "4.6. Erase Head Height and Tilt Adjustment", "4.7. Back Tension Adjustment", "4.8. Playback Head and Record Head Height Adjustment and Azimuth Alignment", "4.9. Record Head Stroke Adjustment", etc. will be required.

As a case may be, the said waving or slippage may have been caused from defective Supply Pressure Roller Ass'y or Take-up Pressure Roller Ass'y without parallel contact with capstans. If such are noted, the Pressure Roller Assemblies will have to be replaced.

Further, excessively weak take-up torque or strong take-up torque may cause defective tape travelling.

The LX-5 is intended to be an adjustment-free model, however if the similar matters as above should be noted, please replace the Reel Hub Ass'y to obtain appropriate take-up torque.

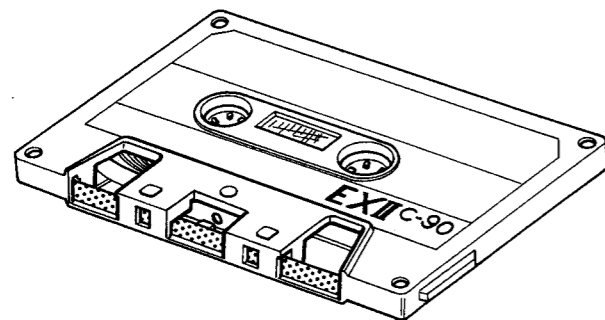


Fig. 4.19

#### 4.11. Flywheel Holder Adjustment

- (1) Refer to Fig. 4.20.

Tighten the Thrust Screws until the gap between the Flywheel Assemblies and Thrust Screws becomes minimized when both of the Capstan Shafts are moved backwardly and forwardly (the Thrust Springs between the Capstan Flanges and Flywheel Thrust Caps are in a flat state).

Excessive tightening of the Thrust Screws however will give damages on the Flywheel Assemblies, to which careful attention is invited.

- (2) Return the Thrust Screws by 1/2 turn.
- (3) Fixing the Thrust Screws with a screwdriver, lock the Lock Nut.
- (4) Apply a quantity of lock tight paint to the Thrust Screws.

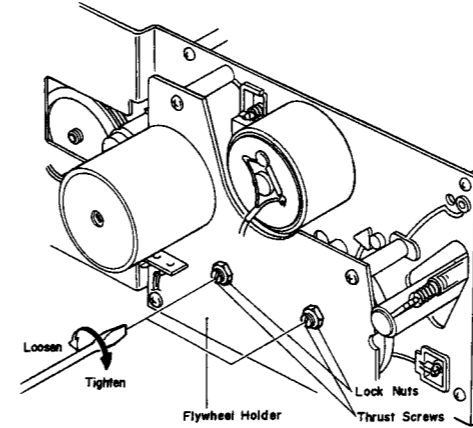


Fig. 4.20

#### 4.12. Tape Speed Adjustment

Refer to Fig. 4.21.

- (1) Remove the Top Cover Ass'y referring to item 2.1.
- (2) Connect a Frequency Counter to the Output Jack.
- (3) Load a 3 kHz Speed Wow/Flutter Tape (DA09006A) and play it back.
- (4) Adjust the Tape Speed Adjustment Volume (VR501) incorporated in the Capstan Motor to obtain 3,000 Hz on the Frequency counter.

CCW: Motor drives slowly.

CW: Motor drives fast.

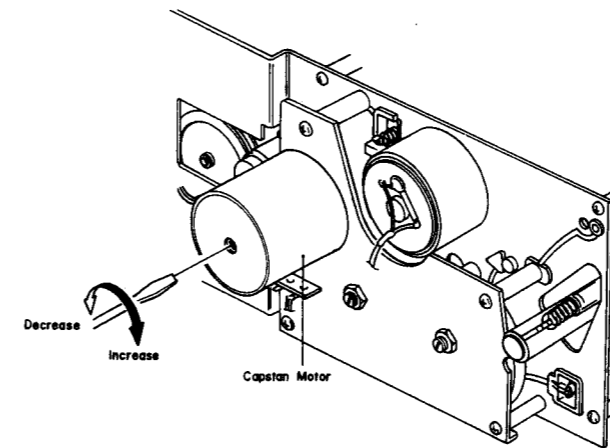


Fig. 4.21

#### 4.13. Lubrication

LX-5 is a lubrication-free cassette deck except when parts are replaced. Apply the following lubricant for each replaced part:

- (1) LAUNA #100  
Capstan Shaft  
Pressure Roller Shaft  
Thrust Cap
- (2) FLOIL GB-TS-1  
Reel Hub Shaft  
Thrust portion on the Capstan Shaft  
FLOIL GB-TS-1, made by Kanto Chemicals Co., Ltd. in Japan.  
We suggest that you use the above or equivalent type. If unavailable please contact Kanto Chemicals Co., Ltd., 2-7 Kanda Suda-cho Chiyoda-ku, Tokyo 101 Japan.

- (3) Silicon Oil #3000 CST  
Air Damper Piston

Note: Excessive lubrication may cause defective damper action as the 0.2 $\phi$  hole at the end of the cylinder may be filled with oil.

5. PARTS LOCATION FOR ELECTRICAL ADJUSTMENT

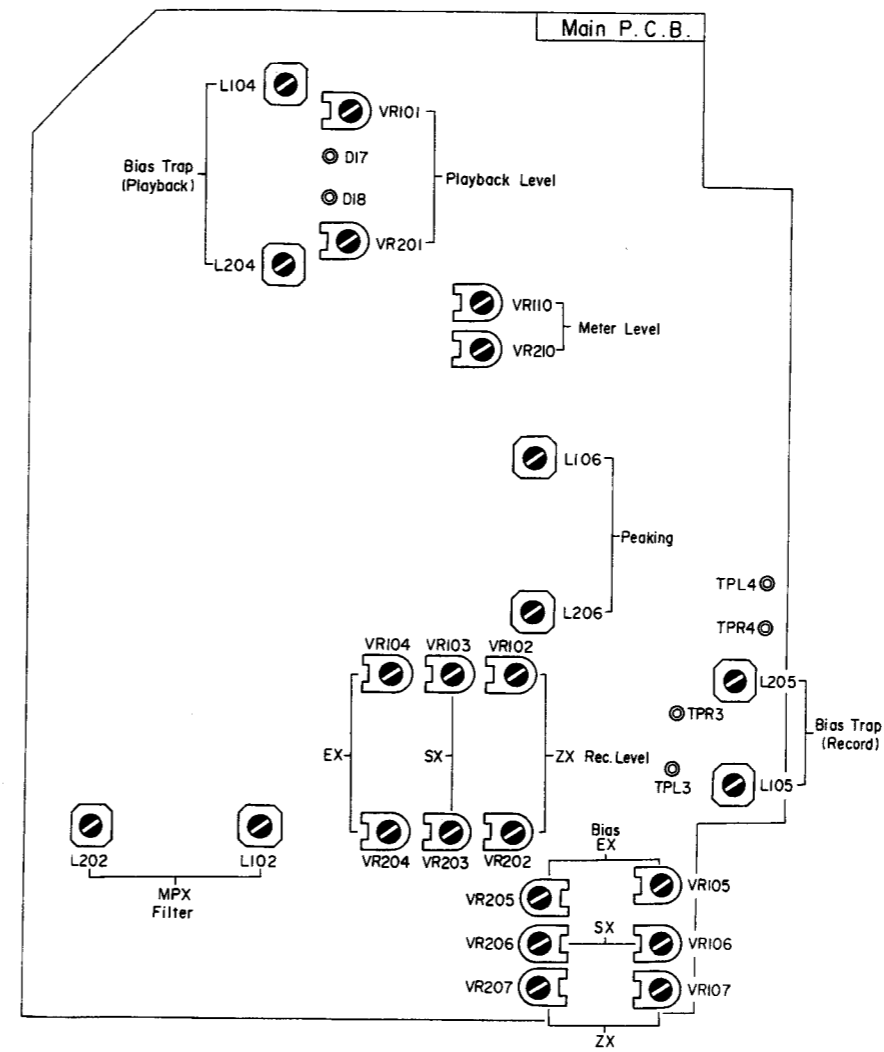
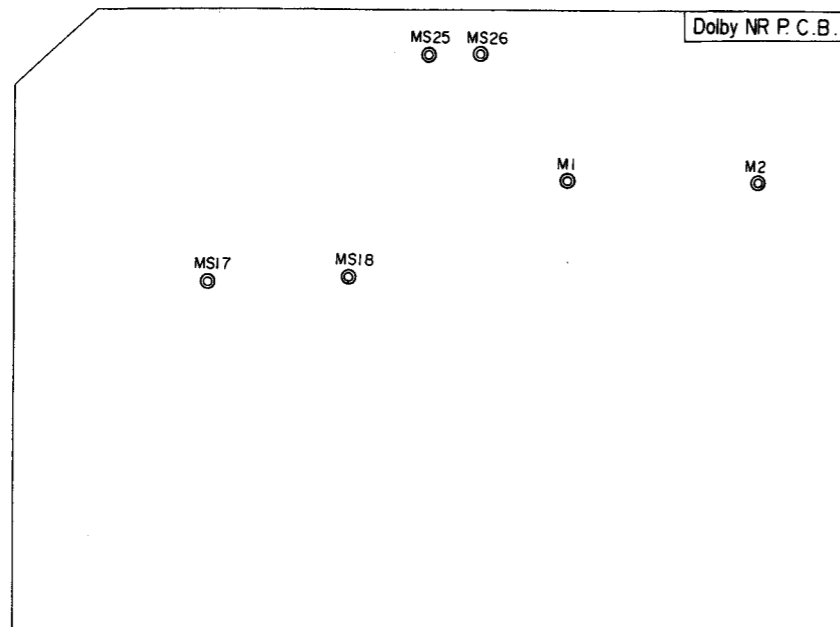
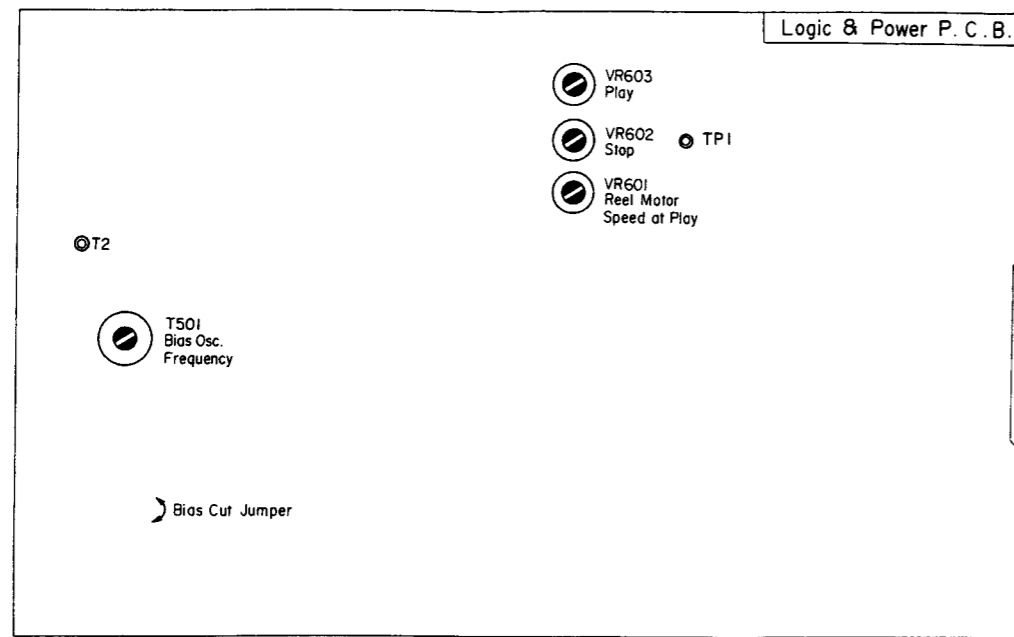


Fig. 5

## 6. ELECTRICAL ADJUSTMENTS AND MEASUREMENTS

### 6.1. Adjustment and Measurement Instructions

Note: Electrical adjustment should be performed after mechanical adjustment is completed.

STEP	ITEM	SIGNAL SOURCE	OUTPUT CONNECTION	MODE	ADJUSTMENT	REMARKS
1	Tape Speed Adjustment	3 kHz Speed and Wow/Flutter Tape (DA09006A)	Frequency Counter to Output Jacks	Playback Monitor SW – Tape	Capstan Motor Governor P.C.B. VR501	Adjust VR501 to obtain 3 kHz $\pm$ 0.5%. (VR501 is incorporated in the capstan motor.)
2	Meter Level Calibration	400 Hz to Input Jacks	VTVM to MS25, MS26 on Dolby NR P.C.B.	Monitor SW – Source	Main P.C.B. VR110, VR210	<ol style="list-style-type: none"> <li>1. Feed in 400 Hz, then adjust the Input Level controls to obtain 90 mV <math>-0.5</math> dB on the VTVM.</li> <li>2. Adjust VR110 (VR210) so that the 0 dB segment of the level meter starts illuminating.</li> <li>3. Adjust the Input Level controls to obtain 90 mV on the VTVM, then decrease the generator output level by 20 dB.</li> <li>4. Check to insure that the segment for <math>-20</math> dB illuminates.</li> </ol>
3	MPX Filter Adjustment	19 kHz $\pm$ 100 Hz to Input Jacks	VTVM to Output Jacks	Monitor SW – Source MPX SW – OFF/ON Dolby NR SW – OFF	Main P.C.B. L102, L202	<ol style="list-style-type: none"> <li>1. Adjust Input Level controls to obtain 0 dB (1 V) on the VTVM.</li> <li>2. Set the MPX Filter switch to IN, then adjust L105 (L205) to obtain the minimum reading on the VTVM (the minimum reading will be less than <math>-30</math> dB).</li> </ol>
4	Playback Head Track Alignment	1 kHz Track Alignment Tape (DA09007A)	VTVM to Output Jacks	Playback Monitor SW – Tape Tape SW – SX Eq. SW – $70 \mu$ s Dolby NR SW – OFF MPX SW – OFF	PH Height Gear	Adjust the PH Height Gear to obtain minimum readings of both channels on the VTVM. Refer to "Playback Head Height Adjustment and Azimuth Alignment" in item 4.8.
5	Playback Head Azimuth Alignment	15 kHz Azimuth Tape (DA09004A)	VTVM to Output Jacks	Same as above	Playback Head Azimuth Alignment Screw	Adjust the Playback Head Azimuth Alignment Screw to obtain the maximum readings of both channels on the VTVM. Refer to "Playback Head Height Adjustment and Azimuth Alignment" in item 4.8. Note: Repeat steps 4 and 5 one or two times to obtain optimum performance.
6	Playback Level Calibration	400 Hz Level Tape (DA09005A)	VTVM to MS25, MS26 on Dolby NR P.C.B.	Same as above	Main P.C.B. VR101, VR201	Adjust VR101 (VR201) to obtain 90 mV on the VTVM.
7	Playback Frequency Response	400 Hz Level Tape (DA09005A) 10 kHz PB Frequency Tape (DA09003A) 15 kHz PB Frequency Tape (DA09002A) 20 kHz PB Frequency Tape (DA09001A)	VTVM to Output Jacks	Same as above	Main P.C.B. R120, R220 R121, R221	<ol style="list-style-type: none"> <li>1. Load a 400 Hz level tape and play it back.</li> <li>2. Load 10 kHz, 15 kHz and 20 kHz PB frequency response tapes and adjust the playback head azimuth to obtain maximum levels on the VTVM with each tape.</li> <li>3. Read the maximum levels with each tape and check to insure that the levels against the 400 Hz level tape are within the following ranges. If not, obtain satisfactory results by shorting R120 (R220) or R121 (R221). 10 kHz (<math>-20</math> dB) <math>-2</math> dB to <math>+2</math> dB 15 kHz (<math>-20</math> dB) <math>-2</math> dB to <math>+3</math> dB 20 kHz (<math>-20</math> dB) <math>-2</math> dB to <math>+4</math> dB Check to insure that the difference in level between 10 kHz (<math>-20</math> dB) and 20 kHz (<math>-20</math> dB) is less than 2 dB.</li> <li>4. Conduct step 5 "Playback Head Azimuth Alignment".</li> </ol>

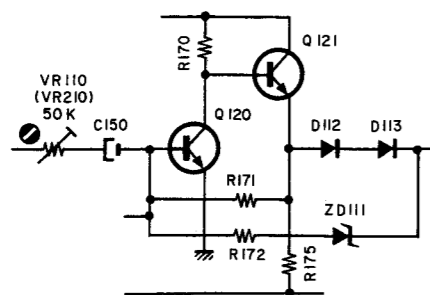


Fig. 6.1 2. Meter Level

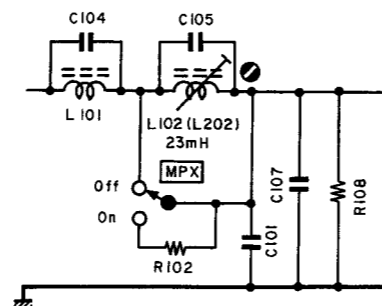


Fig. 6.2 3. MPX Filter

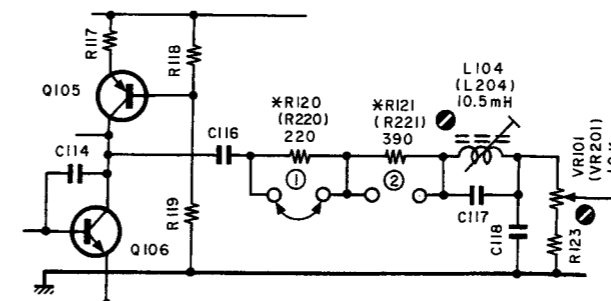


Fig. 6.3

6. Playback Level  
7. Playback Frequency Response

STEP	ITEM	SIGNAL SOURCE	OUTPUT CONNECTION	MODE	ADJUSTMENT	REMARKS
8	Bias Oscillation Frequency and Erase Current Adjustment		VTVM across the additional 0.1 Ω resistor and Frequency Counter to T2 on Logic & Power P.C.B.	Record, Pause Monitor SW – Source Tape SW – ZX Eq. SW – 70 μs Dolby NR SW – OFF MPX SW – OFF	Logic & Power P.C.B. T501 R513, R514	<ol style="list-style-type: none"> <li>1. Connect an additional 0.1 Ω resistor in series to the Erase Head, then connect a VTVM across it.</li> <li>2. Set the Bias Tune Volume to center position.</li> <li>3. Adjust T501 to obtain 105 kHz on the frequency counter.</li> <li>4. Check the erase current by the VTVM. Erase current will be in a range of 310 mA to 400 mA (typically approx. 350 mA). If erase current is not sufficient, increase it by shorting R513 or R514.</li> <li>5. After completion of the erase current adjustment, re-check the bias oscillation frequency.</li> <li>6. Remove the additional 0.1 Ω resistor.</li> </ol>
9	Record Amplifier Equalizer Adjustment	23 kHz (-20 dB) to Input Jacks	VTVM to TPL4, TPR4 on Main P.C.B.	Same as above	Main P.C.B. L106, L206	<ol style="list-style-type: none"> <li>1. Remove the bias-cut-jumper from the dip side of the Logic &amp; Power P.C.B. Ass'y.</li> <li>2. Adjust L106 (L206) to obtain peak reading at 23 kHz on the VTVM.</li> <li>3. Re-solder the bias-cut-jumper.</li> </ol>
10	Bias Trap Adjustment (Record Amp.)	Remove input signals	VTVM to TPL3, TPR3 on Main P.C.B.	Same as above	Main P.C.B. L105, L205	<ol style="list-style-type: none"> <li>1. Set the Bias Tune Volume to center position.</li> <li>2. Adjust L105 (L205) to obtain the maximum reading on the VTVM.</li> </ol>
11	Bias Trap Adjustment (Playback Amp.)	Remove input signals	VTVM to D17, D18 on Main P.C.B.	Record, Playback Monitor SW – Tape Tape SW – ZX Eq. SW – 70 μs Dolby NR SW – OFF MPX SW – OFF	Main P.C.B. L104, L204	<ol style="list-style-type: none"> <li>1. Set the Bias Tune Volume to center position.</li> <li>2. Adjust L104 (L204) to obtain the minimum reading on the VTVM.</li> </ol>
12	Record Head Height Adjustment	400 Hz (0 dB) to Input Jacks	VTVM to Output Jacks	Record, Playback Monitor SW – Tape Tape SW – SX Eq. SW – 70 μs Dolby NR SW – OFF MPX SW – OFF	RH Height Gear	<ol style="list-style-type: none"> <li>1. Set the Bias Tune Volume to center position.</li> <li>2. Adjust the RH Height Gear to obtain maximum readings of both channels on the VTVM. Refer to "Record Head Height Adjustment and Azimuth Alignment" in item 4.8.</li> </ol>
13	Record Head Azimuth Alignment	15 kHz (-20 dB) to Input Jacks	VTVM to Output Jacks	Same as above	Record Head Azimuth Alignment Screw	<ol style="list-style-type: none"> <li>1. Set the Bias Tune Volume to center position.</li> <li>2. Adjust the Record Head Azimuth Alignment Screw to obtain maximum readings of both channels on the VTVM. Refer to "Record Head Height Adjustment and Azimuth Alignment" in item 4.8.</li> </ol> <p>Note: Repeat steps 12 and 13 one or two times to obtain optimum performance.</p>

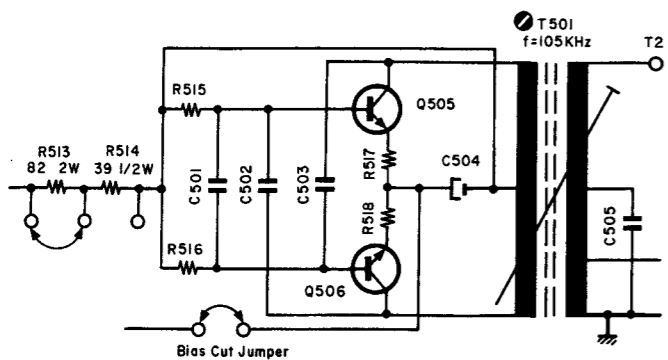


Fig. 6.4  
8. Bias Oscillation Frequency and Erase Current

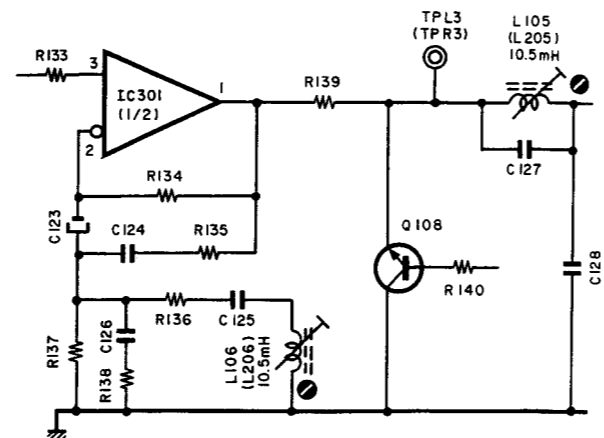


Fig. 6.5  
9. Record Amp. Equalizer  
10. Bias Trap (Record Amp.)  
15. Overall Frequency Response

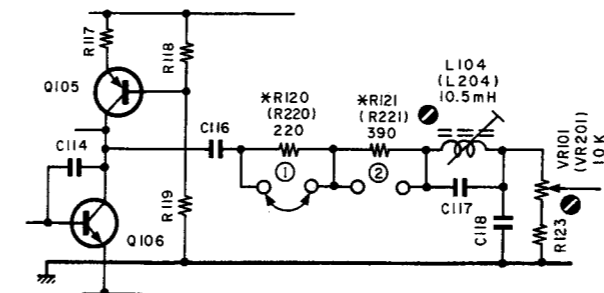


Fig. 6.6  
11. Bias Trap (Playback Amp.)

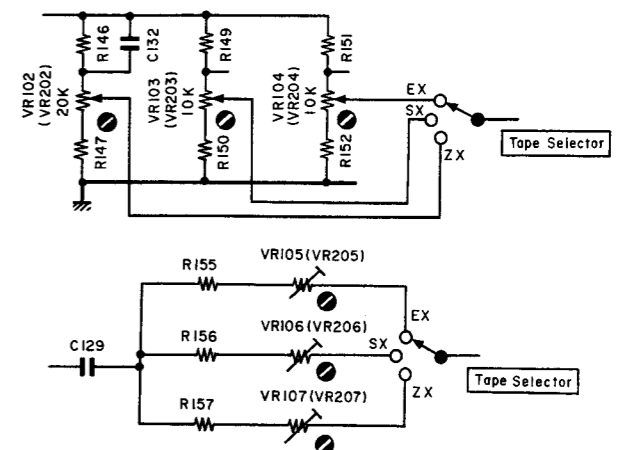


Fig. 6.7  
14. Record Level and Recording Bias Current

STEP	ITEM	SIGNAL SOURCE	OUTPUT CONNECTION	MODE	ADJUSTMENT	REMARKS
14	Record Level Calibration and Recording Bias Current Adjustment	400 Hz (0 dB), 10 kHz and 20 kHz (-20 dB) to Input Jacks	VTVM and Distortion Meter to Output Jacks	Record, Playback Monitor SW - Source/Tape Tape SW - ZX/SX/EX Eq. SW - 70 $\mu$ s (ZX/SX) 120 $\mu$ s (EX) Dolby NR SW - ON (C-Type/ B-Type)/OFF MPX SW - OFF	Main P.C.B. (Record Level) ZX: VR102, VR202 SX: VR103, VR203 EX: VR104, VR204  (Bias Current) ZX: VR107, VR207 SX: VR106, VR206 EX: VR105, VR205	Adjustment should be made in the order of ZX, SX and EX. 1. Set the Bias Tune Volume to center position. 2. Set the Monitor switch to Source and Dolby NR switch to C-Type. 3. Feed in 400 Hz, then set the Input Level controls to obtain 0 dB (1 V) on the VTVM. 4. Set the Monitor switch to Tape. 5. Load a reference ZX tape (DA09037A), reference SX tape (DA09025A) and reference EXII tape (DA09066A). 6. Adjust Record Cal. VR102 (VR202) for ZX, VR103 (VR203) for SX and VR104 (VR204) for EX to center position. 7. Feed in 400 Hz (0 dB), then record and play it back. Adjust Bias VR107 (VR207) for ZX, VR106 (VR206) for SX and VR105 (VR205) for EX to obtain the maximum readings on the VTVM. 8. Feed in 20 kHz (-20 dB), then adjust Bias VR107 (VR207) for ZX, VR106 (VR206) for SX and VR105 (VR205) for EX to obtain the same readings as source monitor levels on the VTVM. 9. Feed in 400 Hz (0 dB), then adjust Record Cal. VR102 (VR202) for ZX, VR103 (VR203) for SX and VR104 (VR204) for EX to obtain 0 dB on the VTVM. 10. Repeat above 8 and 9 two or three times to obtain optimum performance. 11. Set the Dolby NR switch to OFF. 12. Feed in 10 kHz (-20 dB) and 20 kHz (-20 dB), then record and play them back. Check to insure that the levels are within -20 dB $\pm$ 3 dB against the levels in Dolby NR C-Type. 13. Set the Dolby NR switch to B-Type. 14. Feed in 10 kHz (-20 dB) and 20 kHz (-20 dB), then record and play them back. Check to insure that the levels are within -20 dB $\pm$ 2 dB against the levels in Dolby NR OFF. 15. Check to insure whether the total harmonic distortion is less than 0.9% for ZX tape and 1.0% for SX and EXII tapes. 16. If above is not sufficient, repeat 7 to 15 till satisfactory results are obtained.
15	Overall Frequency Response Adjustment	400 Hz (0 dB) and 20 Hz to 20 kHz (-20 dB) to Input Jacks	VTVM to Output Jacks	Record, Playback Monitor SW - Source/Tape Tape SW - ZX/SX/EX Eq. SW - 70 $\mu$ s (ZX/SX) 120 $\mu$ s (EX) Dolby NR SW - OFF MPX SW - OFF	Main P.C.B. L106, L206	1. Set the Bias Tune Volume to center position. 2. Set the Monitor switch to Source. 3. Feed in 400 Hz (0 dB) and adjust Input Level controls to obtain 0 dB on the VTVM. 4. Decrease the generator output level by 20 dB. 5. Set the Monitor switch to Tape, then record and play it back. 6. Feed in 20 Hz to 20 kHz (-20 dB), and check to insure whether the output levels are within -20 dB $\pm$ 4 dB. 7. If above is not sufficient, adjust L106 (L206) to obtain approx. -20 dB on the VTVM at 20 kHz. Then, conduct step 14 "Record Level Calibration and Recording Bias Current Adjustment" 8. If above is not sufficient, precise re-adjustment of step 7 "Playback Frequency Response", replacement of Playback Head or Record Head, or check on item 4.10 "Tape Travelling Adjustment" will be required.
16	Crosstalk Measurement	1 kHz to Input Jacks	1 kHz Band Pass Filter and VTVM to Output Jacks	Record and Playback Monitor SW - Tape Tape SW - ZX Eq. SW - 70 $\mu$ s Dolby NR SW - OFF MPX SW - OFF		1. Set the Bias Tune Volume to center position. 2. Erase the tape with bulk eraser. 3. Adjust the Input Level controls to obtain 0 dB on the VTVM, and record the signals on the reference ZX tape (DA09037A). 4. Turn the cassette tape the other way round and play it back. 5. Measure the difference between 3 and 4.
17	Channel Separation Measurement	1 kHz to Input Jacks	Same as above	Same as above		1. Set the Bias Tune Volume to center position. 2. Erase the tape with bulk eraser. 3. Adjust L ch (R ch) Input Level control to obtain 0 dB on the VTVM, and close R ch (L ch) Input Level control. 4. Record and play it back, then measure the R ch (L ch) level.
18	Erasure Measurement	100 Hz to Input Jacks	100 Hz Band Pass Filter and VTVM to Output Jacks	Record and Playback Monitor SW - Tape Tape SW - ZX Eq. SW - 70 $\mu$ s Dolby NR SW - OFF MPX SW - OFF		1. Set the Bias Tune Volume to center position. 2. Erase the tape with bulk eraser. 3. Adjust Input Level controls to obtain 0 dB on the VTVM, and record the signals on the reference ZX tape (DA09037A). 4. Rewind the tape, close Input Level controls, and then record again. 5. Rewind the tape, play it back, and then measure the difference between 3 and 4.

STEP	ITEM	SIGNAL SOURCE	OUTPUT CONNECTION	MODE	ADJUSTMENT	REMARKS
19	Signal to Noise Ratio Measurement	400 Hz to Input Jacks	IHF-A Curve Filter, Distortion Meter and VTVM to Output Jacks	Record and Playback Monitor SW – Tape Tape SW – ZX Eq. SW – 70 $\mu$ s Dolby NR SW – ON (B-Type/C-Type) MPX SW – OFF		1. Set the Bias Tune Volume to center position. 2. Set the Dolby NR switch to B-Type/C-Type. 3. Feed in 400 Hz, then record and play it back. 4. Adjust the Input Level controls to obtain 3% total harmonic distortion in Playback mode. 5. Close the Input Level controls then record. 6. After rewind, play back and check the output level difference between 4 and 5. Note: The filter of IHF-A curve shall be used in the measurements.
20	Total Harmonic Distortion Measurement	400 Hz to Input Jacks	VTVM and Distortion Meter to Output Jacks	Record and Playback Monitor SW – Tape Tape SW – ZX/SX/EX Eq. SW – 70 $\mu$ s (ZX/SX) 120 $\mu$ s (EX) Dolby NR SW – OFF MPX SW – OFF		1. Set the Bias Tune Volume to center position. 2. Adjust the Input Level controls to obtain 0 dB on the VTVM. 3. Record and play it back. 4. Read the distortion meter and check to insure that the distortion is as follows: EXII . . . . . 1.0% or less SX . . . . . 1.0% or less ZX . . . . . 0.9% or less
21	Wow/Flutter Measurement	3 kHz Speed and Wow/Flutter Tape (DA09006A)	Wow/Flutter Meter to Output Jacks	Playback Monitor SW – Tape Eq. SW – 70 $\mu$ s		Play back and read the wow/flutter meter.

### 6.2. Playback Frequency Response Adjustment

Fig. 6.8 shows a playback equalization curve and Fig. 6.9 is the playback amp. circuit for adjustment.

#### (1) Peaking Adjustment (for high frequency response)

This adjustment will be required if playback level is not sufficient when 20 kHz PB frequency response tape is played back as referred to step 7 in 6.1 "Adjustment and Measurement Instructions".

Peaking portion compensates the gap loss of the playback head. Peaking level is varied by the short circuit of R120 (R220) or R121 (R221) as illustrated in Fig. 6.8.

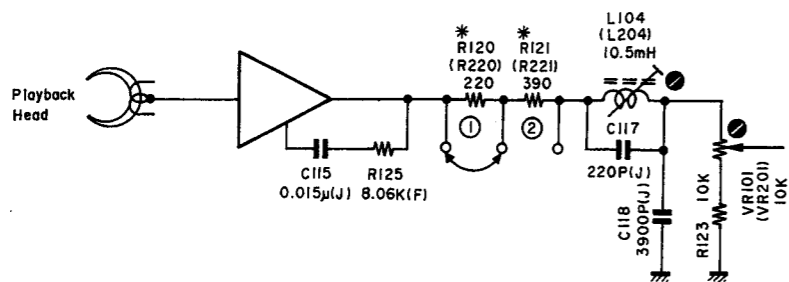


Fig. 6.9 Playback Eq. Amp.

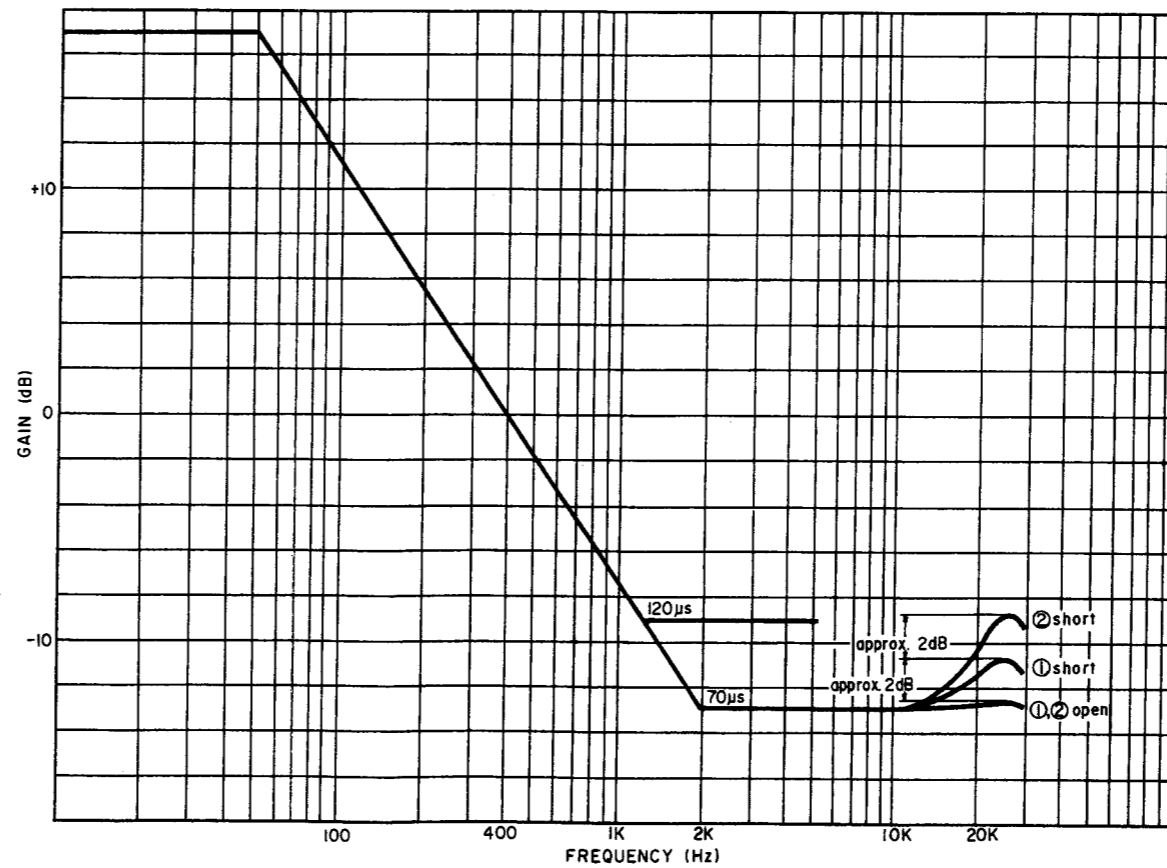


Fig. 6.8 Playback Equalization Curve



**6.3. Dolby NR Circuit Check**

Dolby NR circuit incorporates Dolby NR ICs which have no adjustment point.

Perform the following checks and make sure that the IC operates accurately, i.e., accuracy of frequency response through IC.

**6.3.1. Dolby NR B-Type Circuit Check**

**(1) Playback Dolby NR Circuit**

Signal Source: 1.4 kHz to pin No. M17 (M18) on the Dolby NR P.C.B.

Output Connection: VTVM to MS25 (MS26) on the Dolby NR P.C.B.

Mode: Stop  
Monitor SW – Tape  
Dolby NR SW – B-Type/OFF

- (a) Connect a VTVM to MS25 (MS26) on the Dolby NR P.C.B. Ass'y.
- (b) Set the Dolby NR switch to B-Type. Feed in 1.4 kHz to pin No. M17 (M18) and adjust the generator output control to obtain 9 mV on the VTVM.
- (c) Set the Dolby NR switch to OFF. Check to insure that the reading is +3.2 dB ±1.5 dB on the VTVM.

**(2) Record Dolby NR Circuit**

Signal Source: 1.4 kHz to Input Jacks  
Output Connection: VTVM to MS25 (MS26) and M1 (M2) on the Dolby NR P.C.B.

Mode: Stop  
Monitor SW – Source  
Dolby NR SW – B-Type/OFF

- (a) Connect a VTVM to MS25 (MS26) on the Dolby NR P.C.B. Ass'y.
- (b) Feed in 1.4 kHz and adjust the Input Level controls to obtain 9 mV/2.85 mV on the VTVM.
- (c) Remove the VTVM from MS25 (MS26) and reconnect it to M1 (M2) on the Dolby NR P.C.B. Ass'y.
- (d) Check to insure that the reading at M1 (M2) corresponds to the following with Dolby NR switch OFF and B-Type.

Input Level at MS25, MS26	Level at M1 (IC102-16), M2 (IC202-16)	
	Dolby NR OFF	Dolby NR B-Type
9 mV	0 dB	+3.2 dB ±1.5 dB
2.85 mV	0 dB	+8.2 dB ±1.5 dB

**6.3.2. Dolby NR C-Type Circuit Check**

**(1) Playback Dolby NR Circuit**

Signal Source: 1.4 kHz to pin No. M17 (M18) on the Dolby NR P.C.B.

Output Connection: VTVM to MS25 (MS26) on the Dolby NR P.C.B.

Mode: Stop  
Monitor SW – Tape  
Dolby NR SW – C-Type/OFF

- (a) Connect a VTVM to MS25 (MS26) on the Dolby NR P.C.B. Ass'y.
- (b) Set the Dolby NR switch to C-Type. Feed in 1.4 kHz to pin No. M17 (M18) and adjust the generator output control to obtain 9 mV on the VTVM.
- (c) Set the Dolby NR switch to OFF. Check to insure that the reading is +6.5 dB ±1.5 dB on the VTVM.

**(2) Record Dolby NR Circuit**

Signal Source: 1.4 kHz to Input Jacks  
Output Connection: VTVM to MS25 (MS26) and M1 (M2) on the Dolby NR P.C.B.

Mode: Stop  
Monitor SW – Source  
Dolby NR SW – C-Type/OFF

- (a) Connect a VTVM to MS25 (MS26) on the Dolby NR P.C.B. Ass'y.
- (b) Feed in 1.4 kHz and adjust the Input Level controls to obtain 9 mV/2.85 mV on the VTVM.
- (c) Remove the VTVM from MS25 (MS26) and reconnect it to M1 (M2) on the Dolby NR P.C.B. Ass'y.
- (d) Check to insure that the reading at M1 (M2) corresponds to the following with Dolby NR switch OFF and C-Type.

Input Level at MS25, MS26	Level at M1 (IC102-16), M2 (IC202-16)	
	Dolby NR OFF	Dolby NR C-Type
9 mV	0 dB	+6.5 dB ±1.5 dB
2.85 mV	0 dB	+11.4 dB ±1.5 dB

## 7. MOUNTING DIAGRAMS AND PARTS LIST

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
SW1 SW1 SW1  M2 M2 M2	BA04626A BA04627A BA04628A	Power Switch P.C.B. Ass'y (Japan) Power Switch P.C.B. Ass'y (U.S.A. & Canada) Power Switch P.C.B. Ass'y (UK, Australia, 220V Class 2 & Others)	LED301 LED302-306 R301,302 303,305 306 R304 R307 SW301-308 SW309,310 CN15 CN17 CN23	BA04592A	Control Switch P.C.B. Ass'y Serial No.: A12302901 -
	OB02519B OB07406A OB07407A OB07408A	Power Switch P.C.B. Power Switch (Japan) Power Switch (U.S.A. & Canada) Power Switch S.V.B. (UK, Australia, 220V Class 2 & Others)		OB07993C OB06340A OB06341A	Control Switch P.C.B. LED Red TLR208 LED Green TLG208 (5 pcs.)
	OB08363A OB08342A OB08955A	Spark Killer (Japan) Spark Killer (U.S.A. & Canada) Spark Killer (UK, Australia, 220V Class 2 & Others)		OB05575A	Carbon Resistor 560 ERD-25T J
	OE00622A	Screw M3x5 Philips Pan Head (2A) (2 pcs.)		OB01857A OB05676A OB07219A	Carbon Resistor 1K ERD-25T J Carbon Resistor 390K ERD-25T J Switch AKC8S
	OE00752A OJ04536A	Eyelet 2x3 (2 pcs.) Power Switch Holder (1 pce.)		OB07396A OB08928A OB08929A OB08931A	Double Action Switch KHF10901 6P-H Connector 450mm 9P-H Connector 450mm 10P-H Connector 400mm
				OM04222A OM04224A OM04332A	Label CN-15 (1 pce.) Label CN-17 (1 pce.) Label CN-23 (1 pce.)
Q405 R604 R605 PL407 CN13	BA04637A	Shut-off P.C.B. Ass'y	LED301 LED302-306 R301,302 303,305 306 R304 R307 SW301-308 SW309,310 CN15 CN17 CN23	BA04592A	Control Switch P.C.B. Ass'y Serial Nos.: A12301001 - A12302900
	OB07839B OB06228A OB05615A OB09215A OB08552A OB08947A OM04230A	Shut-off P.C.B. Photo Transistor PH104 Carbon Resistor 22K ERD-25T J Fail Safe Type Resistor 100 RDF-25S J Lamp 12V 25mA 9P Connector Label CN-13 (1 pce.)		OB07993A OB06340A OB06341A	Control Switch P.C.B. LED Red TLR208 LED Green TLG208 (5 pcs.)
				OB05575A	Carbon Resistor 560 ERD-25T J
				OB01857A OB05676A OB07219A OB07396A OB08928A OB08929A OB08931A	Carbon Resistor 1K ERD-25T J Carbon Resistor 390K ERD-25T J Switch AKC8S Double Action Switch KHF10901 6P-H Connector 450mm 9P-H Connector 450mm 10P-H Connector 400mm
				OM04222A OM04224A OM04332A	Label CN-15 (1 pce.) Label CN-17 (1 pce.) Label CN-23 (1 pce.)
LED301 302,303 LED304 305 R301,302 CN24	BA04593A	LED P.C.B. Ass'y Serial No.: A12302901 -	LED301 LED302-306 R301,302 303,305 306 R304 R307 SW301-308 SW309,310 CN15 CN17 CN23		
	OB07994C OB06340A	LED P.C.B. LED Red TLR208			
	OB06327A	LED			
	OB01857A OB08967A OE00857A	Carbon Resistor 1K ERD-25T J 9P-H Connector 450mm BT Screw M3x6 Philips Binding Head (1 pce.)			
	OJ04534A OM04236A	Fader House (1 pce.) Label CN-24 (1 pce.)			
LED301 302,303 LED304 305 R301,302 CN24	BA04593A	LED P.C.B. Ass'y Serial Nos.: A12301001 - A12302900	LED301 LED302-306 R301,302 303,305 306 R304 R307 SW301-308 SW309,310 CN15 CN17 CN23		
	OB07994A OB06340A	LED P.C.B. LED Red TLR208			
	OB06327A	LED			
	OB01857A OB08967A OE00857A	Carbon Resistor 1K ERD-25T J 9P-H Connector 450mm BT Screw M3x6 Philips Binding Head (1 pce.)			
	OJ04534A OM04236A	Fader House (1 pce.) Label CN-24 (1 pce.)			

Note: Mounting diagram shows a dip side view of the printed circuit board.

7.1. Power Switch P.C.B. Ass'y

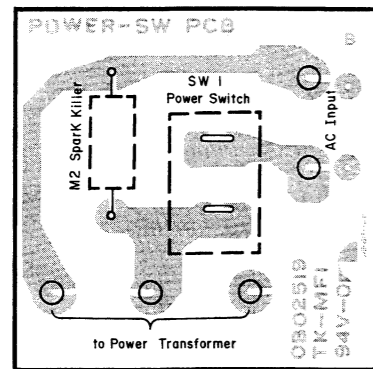


Fig. 7.1

7.2. Shut-off P.C.B. Ass'y

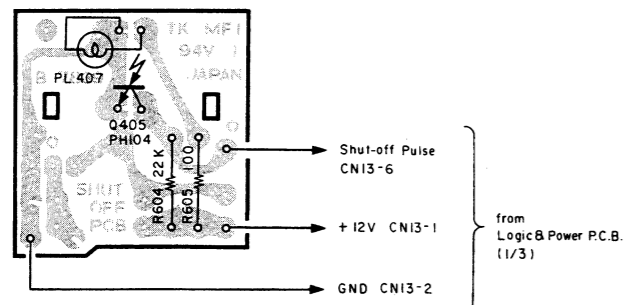


Fig. 7.2

7.4. Control Switch P.C.B. Ass'y

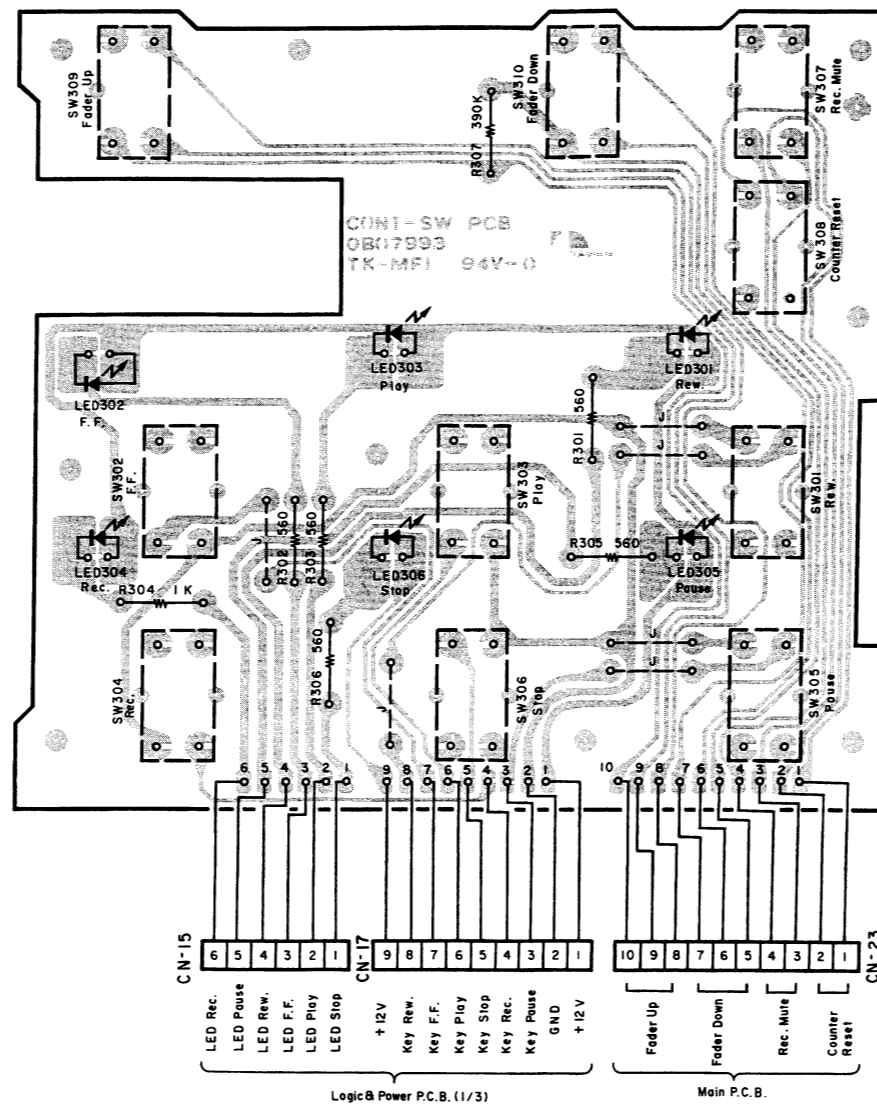


Fig. 7.4.1 Serial No.: A12302901 -

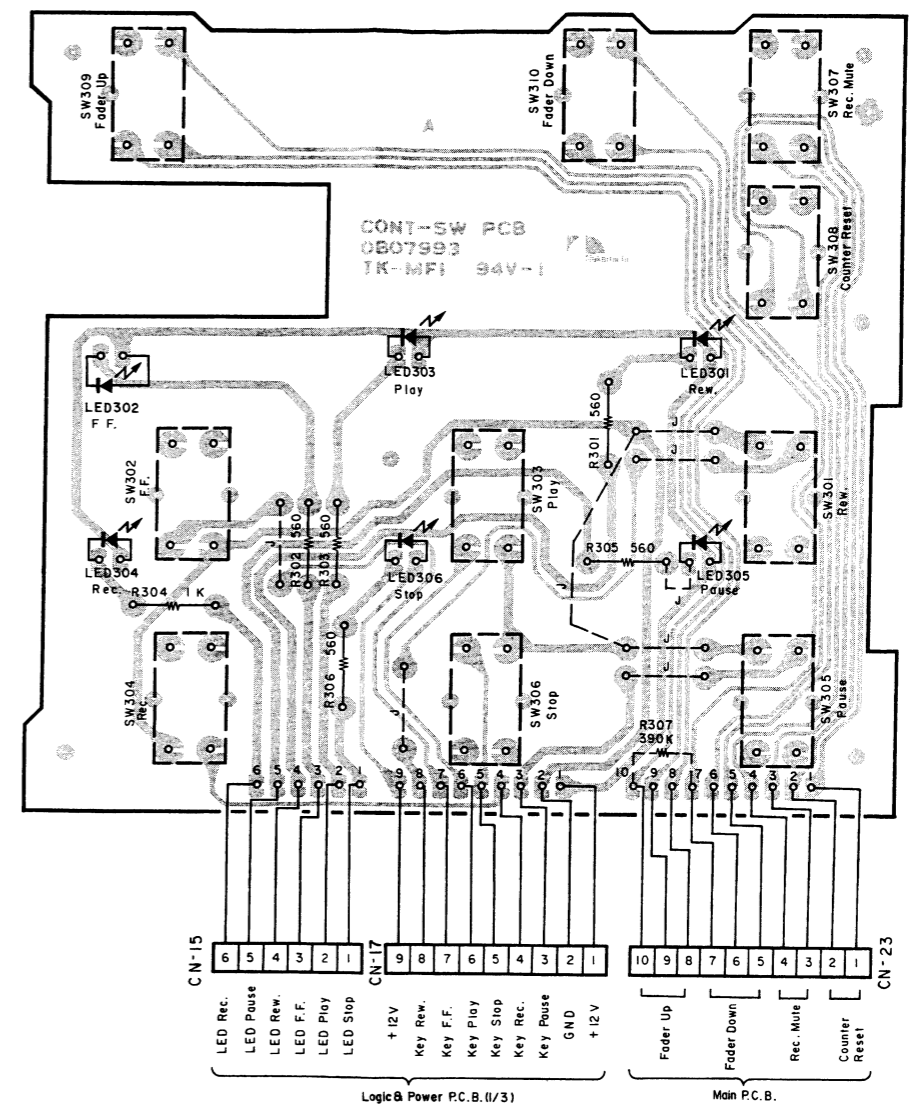


Fig. 7.4.2 Serial Nos.: A12301001 - A12302900

7.3. LED P.C.B. Ass'y

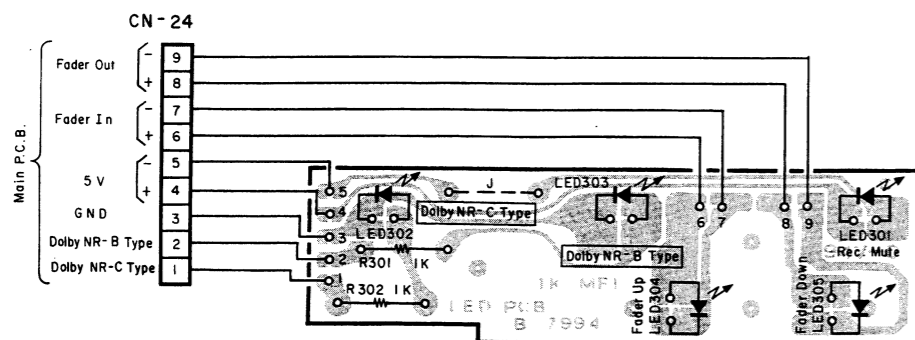


Fig. 7.3.1 Serial No.: A12302901 -

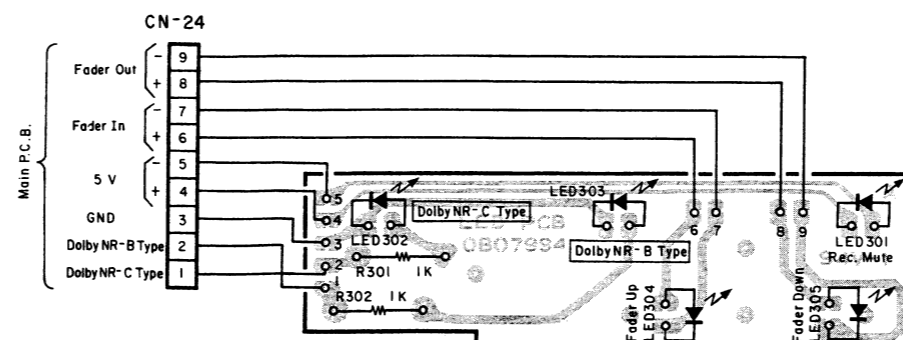


Fig. 7.3.2 Serial Nos.: A12301001 - A12302900

7.5. Counter-1 P.C.B. Ass'y

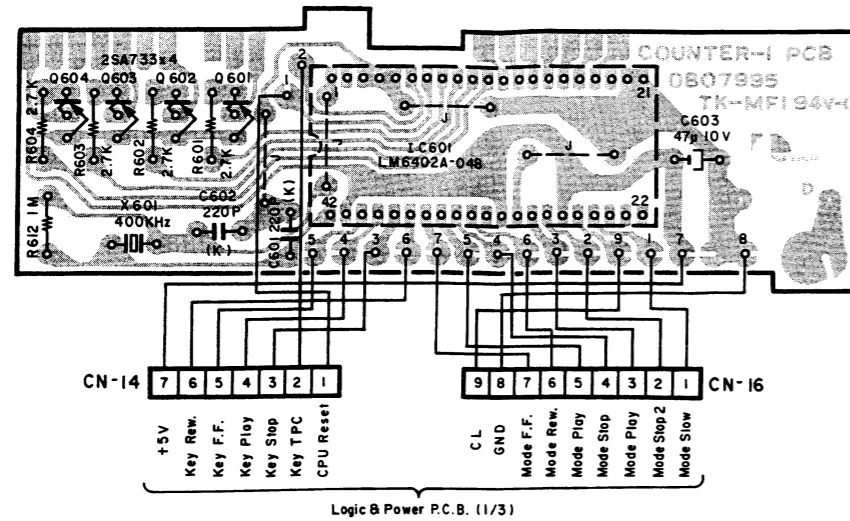


Fig. 7.5.1 Serial No.: A12302901 -

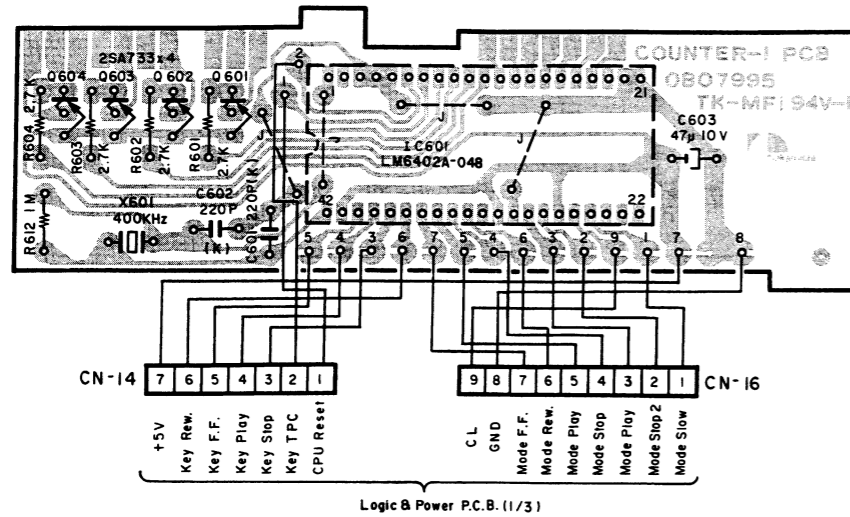


Fig. 7.5.2 Serial Nos.: A12301001 - A12302900

7.6. Counter-2 P.C.B. Ass'y

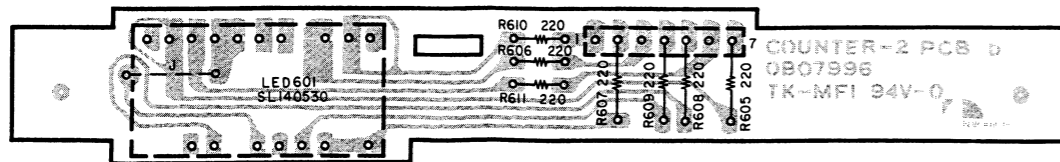


Fig. 7.6

7.7. Indicator P.C.B. Ass'y

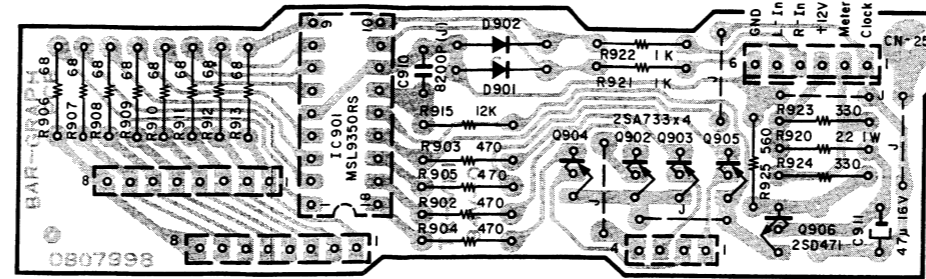


Fig. 7.7.1 Serial No.: A12305404 -

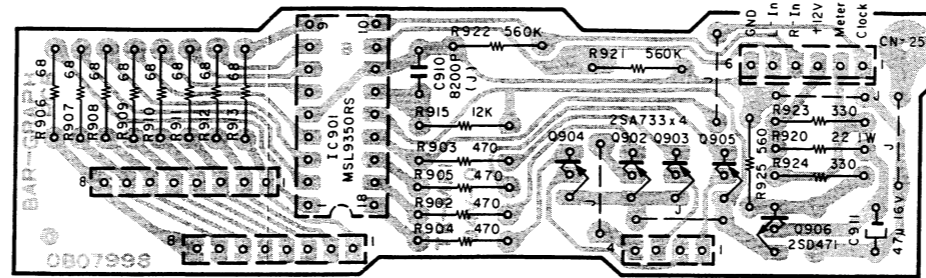


Fig. 7.7.2 Serial Nos.: A12302901 - A12305403

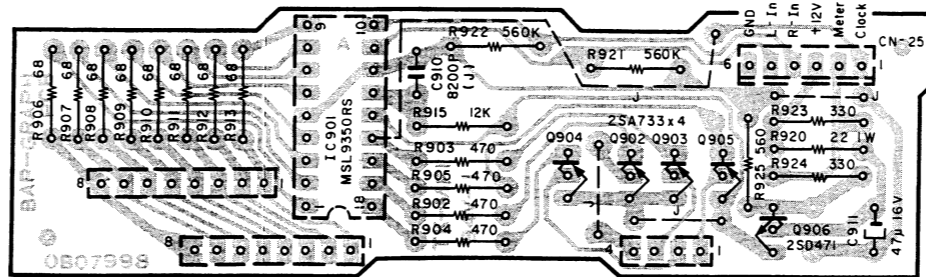


Fig. 7.7.3 Serial Nos.: A12301001 - A12302900

Note: Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.

Schematic Ref. No.	Part No.	Description
	<b>BA04589A</b>	<b>Counter-1 P.C.B. Ass'y</b> Serial No.: A12302901 -
IC601	0B07995D	Counter-1 P.C.B. IC LM6402A-048
Q601,602	0B06320A	Transistor 2SA733
603,604	0B06013A	Transistor
X601	0B08908A	Crystal 400kHz 4BR400BT
R601,602	0B09687A	Carbon Resistor 2.7K ERD-16T J
603,604		
R612	0B09749A	Carbon Resistor 1M ERD-16T J
C601,602	0B09283A	Ceramic Capacitor 220P 50V K
C603	0B01836A	Electrolytic Capacitor 47μ 10V
CN14	0B08930B	7P-H Connector
CN16	0B08929A	9P-H Connector 450mm
	0M04223A	Label CN-16 (1 pce.)
	0M04231A	Label CN-14 (1 pce.)
	0E00037A	Earth Lug B-5 (1 pce.)
	<b>BA04589A</b>	<b>Counter-1 P.C.B. Ass'y</b> Serial Nos.: A12301001 - A12302900
IC601	0B07995A	Counter-1 P.C.B. IC LM6402A-048
Q601,602	0B06320A	Transistor 2SA733
603,604	0B06013A	Transistor
X601	0B08908A	Crystal 400kHz 4BR400BT
R601,602	0B09687A	Carbon Resistor 2.7K ERD-16T J
603,604		
R612	0B09749A	Carbon Resistor 1M ERD-16T J
C601,602	0B09283A	Ceramic Capacitor 220P 50V K
C603	0B01836A	Electrolytic Capacitor 47μ 10V
CN14	0B08930B	7P-H Connector
CN16	0B08929A	9P-H Connector 450mm
	0M04223A	Label CN-16 (1 pce.)
	0M04231A	Label CN-14 (1 pce.)
	0E00037A	Earth Lug B-5 (1 pce.)
	<b>BA04590A</b>	<b>Counter-2 P.C.B. Ass'y</b>
LED601	0B07996D	Counter-2 P.C.B. Counter LED SL-1405-20
R605-611	0B06342A	Carbon Resistor 220 ERD-16T J
	0B09661A	Carbon Resistor 220 ERD-16T J (7 pcs.)
	0J04582A	Counter Spacer (1 pce.)
	<b>BA04591A</b>	<b>Indicator P.C.B. Ass'y</b> Serial No.: A12305404 -
IC901	0B07998C	Indicator P.C.B. IC MSL9350RS
Q902,903	0B06284A	Transistor 2SA733
904,905	0B06013A	Transistor
Q906	0B06066A	Transistor 2SD471
D901,902	0B06181A	Silicon Diode 1S553
R902,903	0B05576A	Carbon Resistor 470 ERD-25T J
904,905		
R906-913	0B01704A	Carbon Resistor 68 ERD-25T J (8 pcs.)
R915	0B09263A	Carbon Resistor 12K ERD-25T J
R920	0B09378A	Fail Safe Type Resistor 22 RSF-1B J
R921,922	0B01857A	Carbon Resistor 1K ERD-25T J
R923,924	0B05577A	Carbon Resistor 330 ERD-25T J

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
R925 C910 C911 CN24	OB05575A OB05814A OB01403A OB08933A OB05266A OB05267A OM04237A OE00037A OB08957A	Carbon Resistor 560 ERD-25T J Mylar Capacitor 8200P 50V J Electrolytic Capacitor 47μ 16V 6P-S Post 8P Flat Cable 50mm (2 pcs.) 4P Flat Cable 50mm (1 pce.) Label CN-25 (1 pce.) Earth Lug B-5 (1 pce.) Meter Display SB103 (1 pce.)		<b>BA04731A</b> OB07997C OB07347A OB07416A OB05622A OB05776A OB01682A OB01889A OB01888A OB01804A OB07401A	<b>Amp. Switch P.C.B. Ass'y</b> Serial No.: A12305404 –  Amp. Switch P.C.B. Volume 10K (A) x 2 Volume 100K (A) x 2 Carbon Resistor 2.2K ERD-25T J Carbon Resistor 1M ERD-25T J Carbon Resistor 6.8K ERD-25T J Carbon Resistor 100K ERD-25T J  Carbon Resistor 10K ERD-25T J Mylar Capacitor 3900P 50V J Push Switch (4 pcs.)
IC901 Q902,903 904,905 Q906 R902,903 904,905 R906-913  R915 R920 R921,922 R923,924 R925 C910 C911 CN24	<b>BA04591A</b> OB07998B OB06284A OB06013A  OB06066A OB05576A  OB01704A  OB09263A OB09378A OB05784A OB05577A OB05575A OB05814A OB01403A OB08933A OB05266A OB05267A OM04237A OE00037A OB08957A	<b>Indicator P.C.B. Ass'y</b> Serial Nos.: A12302901 – A12305403  Indicator P.C.B. IC MSL9350RS Transistor 2SA733  Transistor 2SD471 Carbon Resistor 470 ERD-25T J  Carbon Resistor 68 ERD-25T J (8 pcs.)  Carbon Resistor 12K ERD-25T J Fail Safe Type Resistor 22 RSF-1B J Carbon Resistor 560K ERD-25T J Carbon Resistor 330 ERD-25T J Carbon Resistor 560 ERD-25T J Mylar Capacitor 8200P 50V J Electrolytic Capacitor 47μ 16V 6P-S Post 8P Flat Cable 50mm (2 pcs.) 4P Flat Cable 50mm (1 pce.) Label CN-25 (1 pce.) Earth Lug B-5 (1 pce.) Meter Display SB103 (1 pce.)		<b>BA04587A</b> OB07997B OB07347A OB07355A OB05622A OB05776A OB01889A  OB01888A OB01804A OB07401A	<b>Amp. Switch P.C.B. Ass'y</b> Serial Nos.: A12301001 – A12305403  Amp. Switch P.C.B. Volume 10K (A) x 2 Volume 5K (B) x 2 Carbon Resistor 2.2K ERD-25T J Carbon Resistor 1M ERD-25T J Carbon Resistor 100K ERD-25T J  Carbon Resistor 10K ERD-25T J Mylar Capacitor 3900P 50V J Push Switch (4 pcs.)
IC901 Q902,903 904,905 Q906 R902,903 904,905 R906-913  R915 R920 R921,922 R923,924 R925 C910 C911 CN24	<b>BA04591A</b> OB07998A OB06284A OB06013A  OB06066A OB05576A  OB01704A  OB09263A OB09378A OB05784A OB05577A OB05575A OB05814A OB01403A OB08933A OB05266A OB05267A OM04237A OE00037A OB08957A	<b>Indicator P.C.B. Ass'y</b> Serial Nos.: A12301001 – A12302900  Indicator P.C.B. IC MSL9350RS Transistor 2SA733  Transistor 2SD471 Carbon Resistor 470 ERD-25T J  Carbon Resistor 68 ERD-25T J (8 pcs.)  Carbon Resistor 12K ERD-25T J Fail Safe Type Resistor 22 RSF-1B J Carbon Resistor 560K ERD-25T J Carbon Resistor 330 ERD-25T J Carbon Resistor 560 ERD-25T J Mylar Capacitor 8200P 50V J Electrolytic Capacitor 47μ 16V 6P-S Post 8P Flat Cable 50mm (2 pcs.) 4P Flat Cable 50mm (1 pce.) Label CN-25 (1 pce.) Earth Lug B-5 (1 pce.) Meter Display SB103 (1 pce.)		<b>BA04631A</b> OB02521B OB01887A OB07399A	<b>Monitor Switch P.C.B. Ass'y</b>  Monitor Switch P.C.B. Carbon Resistor 5.6K ERD-25T J Push Switch 6-2S

### 7.8. Amp. Switch P.C.B. Ass'y

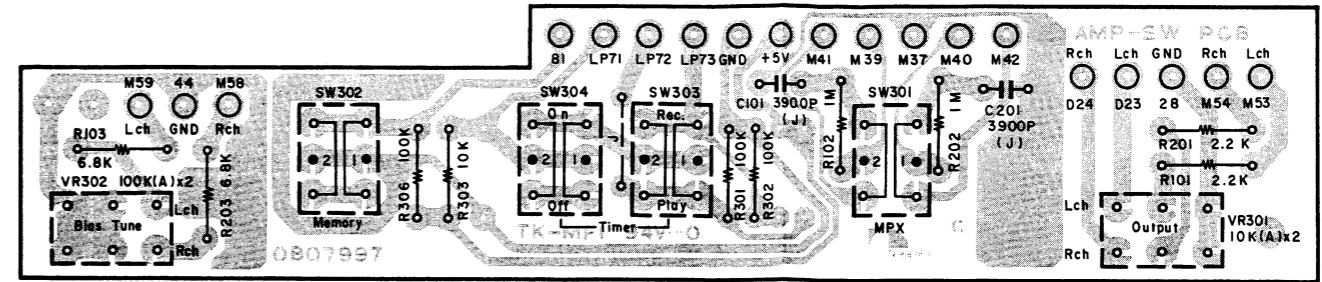


Fig. 7.8.1 Serial No.: A12305404 –

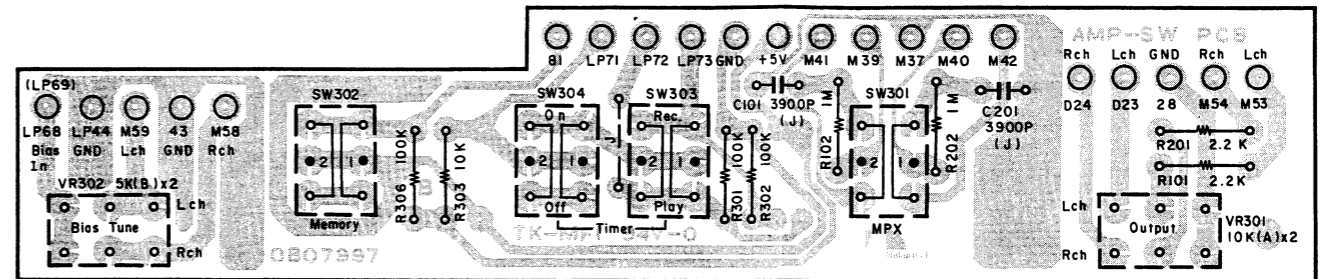


Fig. 7.8.2 Serial Nos.: A12301001 – A12305403

### 7.9. Monitor Switch P.C.B. Ass'y

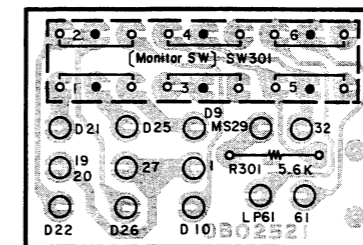


Fig. 7.9

7.10. Dolby NR P.C.B. Ass'y  
 7.10.1. Dolby NR P.C.B. Ass'y (U.S.A. & Canada)

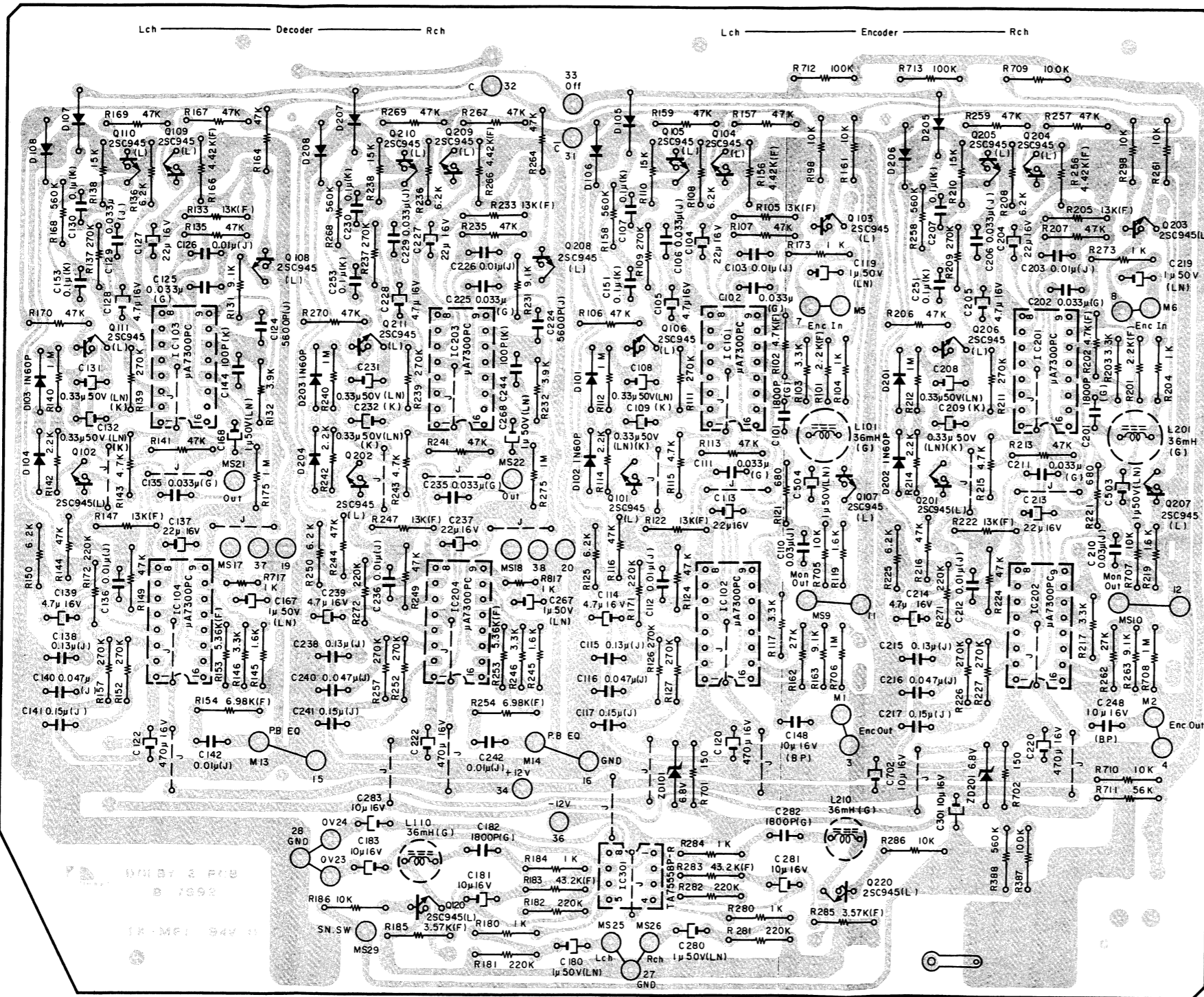


Fig. 7.10.1.1 Serial No.: A12302901 -

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.

Schematic Ref. No.	Part No.	Description
	<b>BA04574A</b>	<b>Dolby NR P.C.B. Ass'y (U.S.A. &amp; Canada)</b> Serial No.: A12302901 -
		- PB Dolby NR -
IC103,104 203,204	OB06200A	IC $\mu$ A7300PC
Q102,108 109,110 111,202 208,209 210,211	OB01872A	Transistor 2SC945 (L)
D103,203	OB00030A	Germanium Diode 1N60P
D104,107 108,204 207,208	OB01909A	Silicon Diode 1S1555
R131,231	OB05694A	Carbon Resistor 9.1K ERD-25T J
R132,232	OB05675A	Carbon Resistor 3.9K ERD-25T J
R133,147 233,247	OB09557A	Metal Film Resistor 13K SN14K2E F
R135,141 144,149 164,167 169,170 235,241 244,249 264,267 269,270	OB05641A	Carbon Resistor 47K ERD-25T J
R136,150 236,250	OB09271A	Carbon Resistor 6.2K ERD-25T J
R137,139 152,157 237,239 252,257	OB05620A	Carbon Resistor 270K ERD-25T J
R138,238	OB05591A	Carbon Resistor 15K ERD-25T J
R140,175 240,275	OB05776A	Carbon Resistor 1M ERD-25T J
R142,242	OB05622A	Carbon Resistor 2.2K ERD-25T J
R143,243	OB01846A	Carbon Resistor 4.7K ERD-25T J
R145,245	OB09565A	Carbon Resistor 1.6K ERD-25T J
R146,246	OB01681A	Carbon Resistor 3.3K ERD-25T J
R153,253	OB09426A	Metal Film Resistor 5.36K SN14K2E F
R154,254	OB09604A	Metal Film Resistor 6.98K SN14K2E F
R166,266	OB09558A	Metal Film Resistor 4.42K SN14K2E F
R168,268	OB05784A	Carbon Resistor 560K ERD-25T J
R172,272	OB05625A	Carbon Resistor 220K ERD-25T J
R177,817	OB01857A	Carbon Resistor 1K ERD-25T J
C122,222	OB01392A	Electrolytic Capacitor 470µ 16V
C124,224	OB05659A	Mylar Capacitor 5600P 50V J
C125,135 225,235	OB09240A	PP Capacitor 0.033µ 100V G
C126,136 142,226 236,242	OB05681A	Mylar Capacitor 0.01µ 50V J
C127,137 227,237	OB01862A	Electrolytic Capacitor 22µ 16V
C128,139 228,239	OB01389A	Electrolytic Capacitor 4.7µ 16V
C129,229	OB05583A	Mylar Capacitor 0.033µ 50V J
C130,153 230,253	OB01603A	Mylar Capacitor 0.1µ 50V K

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
C131,132 231,232	OB09567A	Electrolytic Capacitor 0.33 $\mu$ 50V (LN) K	R171,271	OB05625A	Carbon Resistor 220K ERD-25T J
C138,238	OB09566A	Mylar Capacitor 0.13 $\mu$ 50V J	R701,702	OB05795A	Carbon Resistor 150 ERD-25T J
C140,240	OB05796A	Mylar Capacitor 0.047 $\mu$ 50V J	C101,201	OB09409A	PP Capacitor 1800P 100V G
C141,241	OB05914A	Mylar Capacitor 0.15 $\mu$ 50V J	C102,111	OB09240A	PP Capacitor 0.033 $\mu$ 100V G
C144,244	OB09282A	Ceramic Capacitor 100P 50V K	202,211		
C167,168 267,268	OB09494A	Electrolytic Capacitor 1 $\mu$ 50V (LN)	C103,112	OB05681A	Mylar Capacitor 0.01 $\mu$ 50V J
	OB08714A	IC Socket 16P (4 pcs.)	203,212		
	OE00037A	Earth Lug B-5 (1 pce.)	C104,113	OB01862A	Electrolytic Capacitor 22 $\mu$ 16V
	- Rec. Dolby NR -		204,213		
IC101,102 201,202	OB06200A	IC $\mu$ A7300PC	C105,114	OB01389A	Electrolytic Capacitor 4.7 $\mu$ 16V
Q101,103 104,105 106,107 201,203 204,205 206,207	OB01872A	Transistor 2SC945 (L)	205,214		
ZD101,201	OB06315A	Zener Diode 6.8V XZ068	C106,206	OB05583A	Mylar Capacitor 0.033 $\mu$ 50V J
D101,105 106,201 205,206	OB01909A	Silicon Diode 1S1555	C107,151	OB01603A	Mylar Capacitor 0.1 $\mu$ 50V K
D102,202	OB00030A	Germanium Diode 1N60P	207,251		
L101,201	OB06676A	Inductor 36mH G	C108,109	OB09567A	Electrolytic Capacitor 0.33 $\mu$ 50V (LN) K
R101,201	OB09201A	Metal Film Resistor 2.2K SN14K2E F	208,209		
R102,202	OB09356A	Metal Film Resistor 4.7K SN14K2E F	C110,210	OB09594A	Mylar Capacitor 0.03 $\mu$ 50V J
R103,117 203,217	OB01681A	Carbon Resistor 3.3K ERD-25T J	C115,215	OB09566A	Mylar Capacitor 0.13 $\mu$ 50V J
R104,173 204,273	OB01857A	Carbon Resistor 1K ERD-25T J	C116,216	OB05796A	Mylar Capacitor 0.047 $\mu$ 50V J
R105,122 205,222	OB09557A	Metal Film Resistor 13K SN14K2E F	C117,217	OB05914A	Mylar Capacitor 0.15 $\mu$ 50V J
R106,107 113,116 124,157 159,206 207,213 216,224 257,259	OB05641A	Carbon Resistor 47K ERD-25T J	C119,219	OB09223A	Electrolytic Capacitor 1 $\mu$ 50V (LN)
R108,125 208,225	OB09271A	Carbon Resistor 6.2K ERD-25T J	503,504		
R109,111 126,127 209,211 226,227	OB05620A	Carbon Resistor 270K ERD-25T J	C120,220	OB01392A	Electrolytic Capacitor 470 $\mu$ 16V
R110,210	OB05591A	Carbon Resistor 15K ERD-25T J	C148,248	OB09163A	Electrolytic Capacitor 10 $\mu$ 16V (BP)
R112,212 706,708	OB05776A	Carbon Resistor 1M ERD-25T J		OB08714A	IC Socket 16P (4 pcs.)
R114,214	OB05622A	Carbon Resistor 2.2K ERD-25T J		- Line Amp. -	
R115,215	OB01846A	Carbon Resistor 4.7K ERD-25T J	IC301	OB06287A	IC TA75558P-R
R119,219	OB09565A	Carbon Resistor 1.6K ERD-25T J	Q120,220	OB01872A	Transistor 2SC945 (L)
R121,221	OB05794A	Carbon Resistor 680 ERD-25T J	L110,210	OB06676A	Inductor 36mH G
R156,256	OB09558A	Metal Film Resistor 4.42K SN14K2E F	R180,184	OB01857A	Carbon Resistor 1K ERD-25T J
R158,258	OB05784A	Carbon Resistor 560K ERD-25T J	280,284		
R161,198 261,298 705,707	OB01888A	Carbon Resistor 10K ERD-25T J	R181,182	OB05625A	Carbon Resistor 220K ERD-25T J
R162,262	OB05743A	Carbon Resistor 27K ERD-25T J	281,282		
R163,263	OB05694A	Carbon Resistor 9.1K ERD-25T J	R183,283	OB09582A	Metal Film Resistor 43.2K SN14K2E F
			R185,285	OB09507A	Metal Film Resistor 3.57K SN14K2E F
			R186,286	OB01888A	Carbon Resistor 10K ERD-25T J
			710		
			R387,709	OB01889A	Carbon Resistor 100K ERD-25T J
			712,713		
			R388	OB05784A	Carbon Resistor 560K ERD-25T J
			R711	OB05508A	Carbon Resistor 56K ERD-25T J
			C180,280	OB09223A	Electrolytic Capacitor 1 $\mu$ 50V (LN)
			C181,183	OB01412A	Electrolytic Capacitor 10 $\mu$ 16V
			281,283		
			301,702		
			C182,282	OB09409A	PP Capacitor 1800P 100V G
				- Miscellaneous -	
				OB07992C	Dolby NR P.C.B.

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
	<b>BA04574A</b>	<b>Dolby NR P.C.B. Ass'y (U.S.A. &amp; Canada)</b> Serial Nos.: A12301001 – A12302900	C131,132 231,232 C138,238 C140,240 C141,241 C144,244 C167,168 267,268	<b>OB09567A</b>	Electrolytic Capacitor 0.33 $\mu$ 50V (LN) K
	<b>– PB Dolby NR –</b>			<b>OB09566A</b>	Mylar Capacitor 0.13 $\mu$ 50V J
IC103,104 203,204	<b>OB06200A</b>	IC $\mu$ A7300PC		<b>OB05796A</b>	Mylar Capacitor 0.047 $\mu$ 50V J
Q102,108 109,110 111,202 208,209 210,211	<b>OB01872A</b>	Transistor 2SC945 (L)		<b>OB05914A</b>	Mylar Capacitor 0.15 $\mu$ 50V J
D103,203 D104,107 108,204 207,208	<b>OB00030A</b>	Germanium Diode 1N60P	IC101,102 201,202	<b>OB09282A</b>	Ceramic Capacitor 100P 50V K
R131,231 R132,232 R133,147 233,247	<b>OB01909A</b>	Silicon Diode 1S1555	Q101,103 104,105 106,107 201,203 204,205 206,207	<b>OB09494A</b>	Electrolytic Capacitor 1 $\mu$ 50V (LN)
R135,141 144,149 164,167 169,170 235,241 244,249 264,267 269,270	<b>OB05694A</b>	Carbon Resistor 9.1K ERD-25T J		<b>OB08714A</b>	IC Socket 16P (4 pcs.)
R136,150 236,250	<b>OB05675A</b>	Carbon Resistor 3.9K ERD-25T J		<b>OE00037A</b>	Earth Lug B-5 (1 pce.)
R137,139 152,157 237,239 252,257	<b>OB09557A</b>	Metal Film Resistor 13K SN14K2E F		<b>– Rec. Dolby NR –</b>	
R138,238 R140,175 240,275	<b>OB05641A</b>	Carbon Resistor 47K ERD-25T J	ZD101,201 D101,105 106,201 205,206 D102,202 L101,201 R101,201 R102,202 R103,117 203,217 R104,173 204,273 R105,122 205,222 R106,107 113,116 124,157 159,206 207,213 216,224 257,259	<b>OB06315A</b>	Zener Diode 6.8V XZ068
R142,242 R143,243 R145,245 R146,246 R153,253 R154,254 R166,266 R168,268 R172,272 R177,817	<b>OB09271A</b>	Carbon Resistor 6.2K ERD-25T J		<b>OB01909A</b>	Silicon Diode 1S1555
C122,222 C124,224 C125,135 225,235	<b>OB05620A</b>	Carbon Resistor 270K ERD-25T J		<b>OB00030A</b>	Germanium Diode 1N60P
C126,136 142,226 236,242	<b>OB05591A</b>	Carbon Resistor 15K ERD-25T J		<b>OB06676A</b>	Inductor 36mH G
C127,137 227,237	<b>OB05776A</b>	Carbon Resistor 1M ERD-25T J		<b>OB09201A</b>	Metal Film Resistor 2.2K SN14K2E F
C128,139 228,239	<b>OB05622A</b>	Carbon Resistor 2.2K ERD-25T J		<b>OB09356A</b>	Metal Film Resistor 4.7K SN14K2E F
C129,229 C130,153 230,253	<b>OB01862A</b>	Electrolytic Capacitor 22 $\mu$ 16V		<b>OB01681A</b>	Carbon Resistor 3.3K ERD-25T J
	<b>OB01389A</b>	Electrolytic Capacitor 4.7 $\mu$ 16V		<b>OB01857A</b>	Carbon Resistor 1K ERD-25T J
	<b>OB05583A</b>	Mylar Capacitor 0.033 $\mu$ 50V J		<b>OB09557A</b>	Metal Film Resistor 13K SN14K2E F
	<b>OB01603A</b>	Mylar Capacitor 0.1 $\mu$ 50V K		<b>OB05641A</b>	Carbon Resistor 47K ERD-25T J
				<b>OB09271A</b>	Carbon Resistor 6.2K ERD-25T J
				<b>OB05620A</b>	Carbon Resistor 270K ERD-25T J
				<b>OB05591A</b>	Carbon Resistor 15K ERD-25T J
				<b>OB05776A</b>	Carbon Resistor 1M ERD-25T J
				<b>OB05622A</b>	Carbon Resistor 2.2K ERD-25T J
				<b>OB01862A</b>	Electrolytic Capacitor 22 $\mu$ 16V
				<b>OB01846A</b>	Carbon Resistor 4.7K ERD-25T J
				<b>OB09565A</b>	Carbon Resistor 1.6K ERD-25T J
				<b>OB05794A</b>	Carbon Resistor 680 ERD-25T J
				<b>OB09558A</b>	Metal Film Resistor 4.42K SN14K2E F
				<b>OB05784A</b>	Carbon Resistor 560K ERD-25T J
				<b>OB01888A</b>	Carbon Resistor 10K ERD-25T J
				<b>OB05743A</b>	Carbon Resistor 27K ERD-25T J
				<b>OB05694A</b>	Carbon Resistor 9.1K ERD-25T J



Schematic Ref. No.	Part No.	Description
R171,271	OB05625A	Carbon Resistor 220K ERD-25T J
R701,702	OB05795A	Carbon Resistor 150 ERD-25T J
C101,201	OB09409A	PP Capacitor 1800P 100V G
C102,111	OB09240A	PP Capacitor 0.033μ 100V G
202,211		
C103,112	OB05681A	Mylar Capacitor 0.01μ 50V J
203,212		
C104,113	OB01862A	Electrolytic Capacitor 22μ 16V
204,213		
C105,114	OB01389A	Electrolytic Capacitor 4.7μ 16V
205,214		
C106,206	OB05583A	Mylar Capacitor 0.033μ 50V J
C107,151	OB01603A	Mylar Capacitor 0.1μ 50V K
207,251		
C108,109	OB09567A	Electrolytic Capacitor 0.33μ 50V (LN) K
208,209		
C110,210	OB09594A	Mylar Capacitor 0.03μ 50V J
C115,215	OB09566A	Mylar Capacitor 0.13μ 50V J
C116,216	OB05796A	Mylar Capacitor 0.047μ 50V J
C117,217	OB05914A	Mylar Capacitor 0.15μ 50V J
C119,219	OB09223A	Electrolytic Capacitor 1μ 50V (LN)
503,504		
C120,220	OB01392A	Electrolytic Capacitor 470μ 16V
C148,248	OB09163A	Electrolytic Capacitor 10μ 16V (BP)
	OB08714A	IC Socket 16P (4 pcs.)
— Line Amp. —		
IC301	OB06287A	IC TA75558P-R
Q120,220	OB01872A	Transistor 2SC945 (L)
L110,210	OB06676A	Inductor 36mH G
R180,184	OB01857A	Carbon Resistor 1K ERD-25T J
280,284		
R181,182	OB05625A	Carbon Resistor 220K ERD-25T J
281,282		
R183,283	OB09582A	Metal Film Resistor 43.2K SN14K2E F
R185,285	OB09507A	Metal Film Resistor 3.57K SN14K2E F
R186,286	OB01888A	Carbon Resistor 10K ERD-25T J
710		
R387,709	OB01889A	Carbon Resistor 100K ERD-25T J
712,713		
R388	OB05784A	Carbon Resistor 560K ERD-25T J
R711	OB05508A	Carbon Resistor 56K ERD-25T J
C180,280	OB09223A	Electrolytic Capacitor 1μ 50V (LN)
C181,183	OB01412A	Electrolytic Capacitor 10μ 16V
281,283		
301,702		
C182,282	OB09409A	PP Capacitor 1800P 100V G
— Miscellaneous —		
	OB07992A	Dolby NR P.C.B.

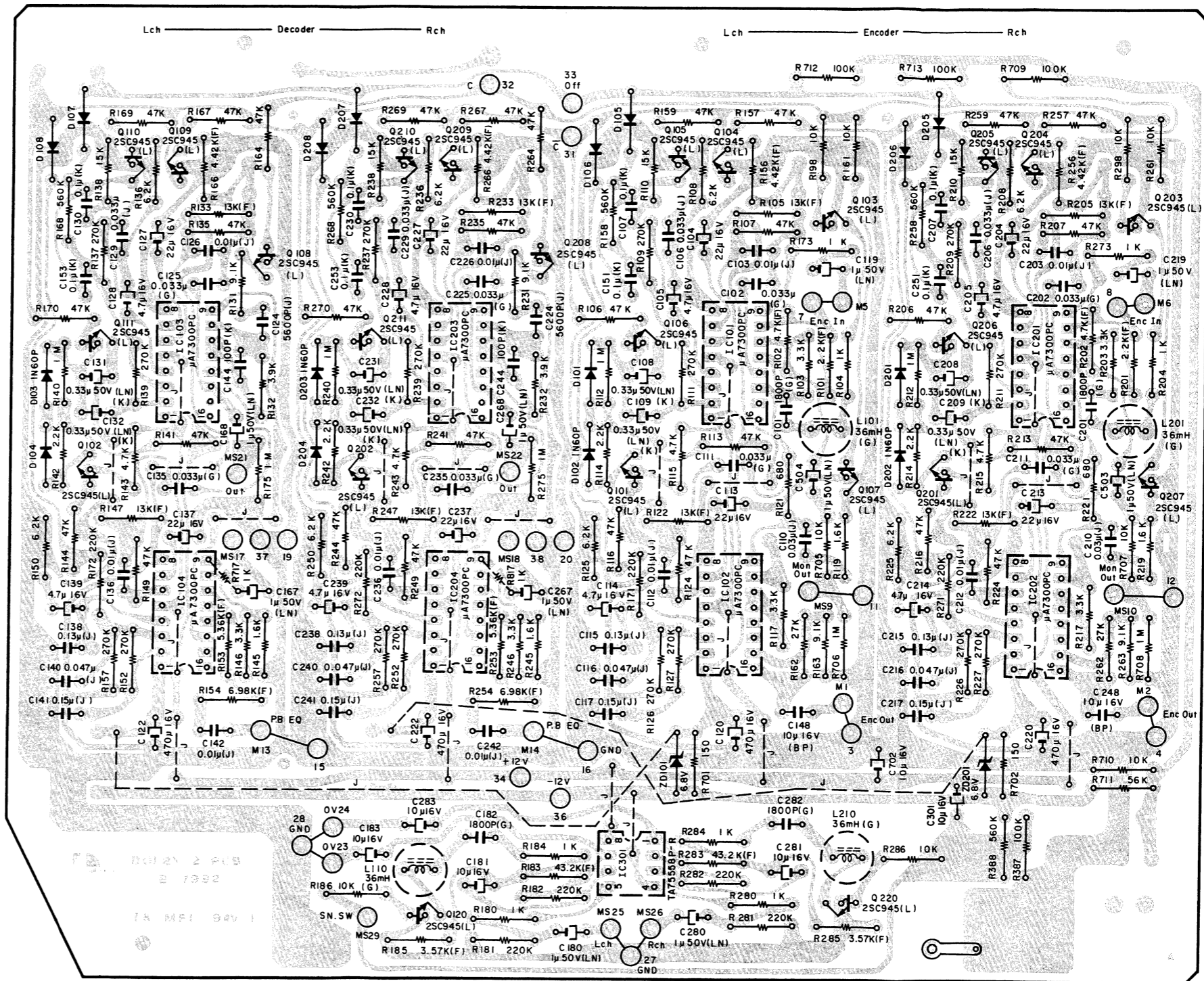


Fig. 7.10.1.2 Serial Nos.: A12301001 – A12302900

Note: Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.

7.10.2. Dolby NR P.C.B. Ass'y (UK, Australia, 220V Class 2, Others & Japan)

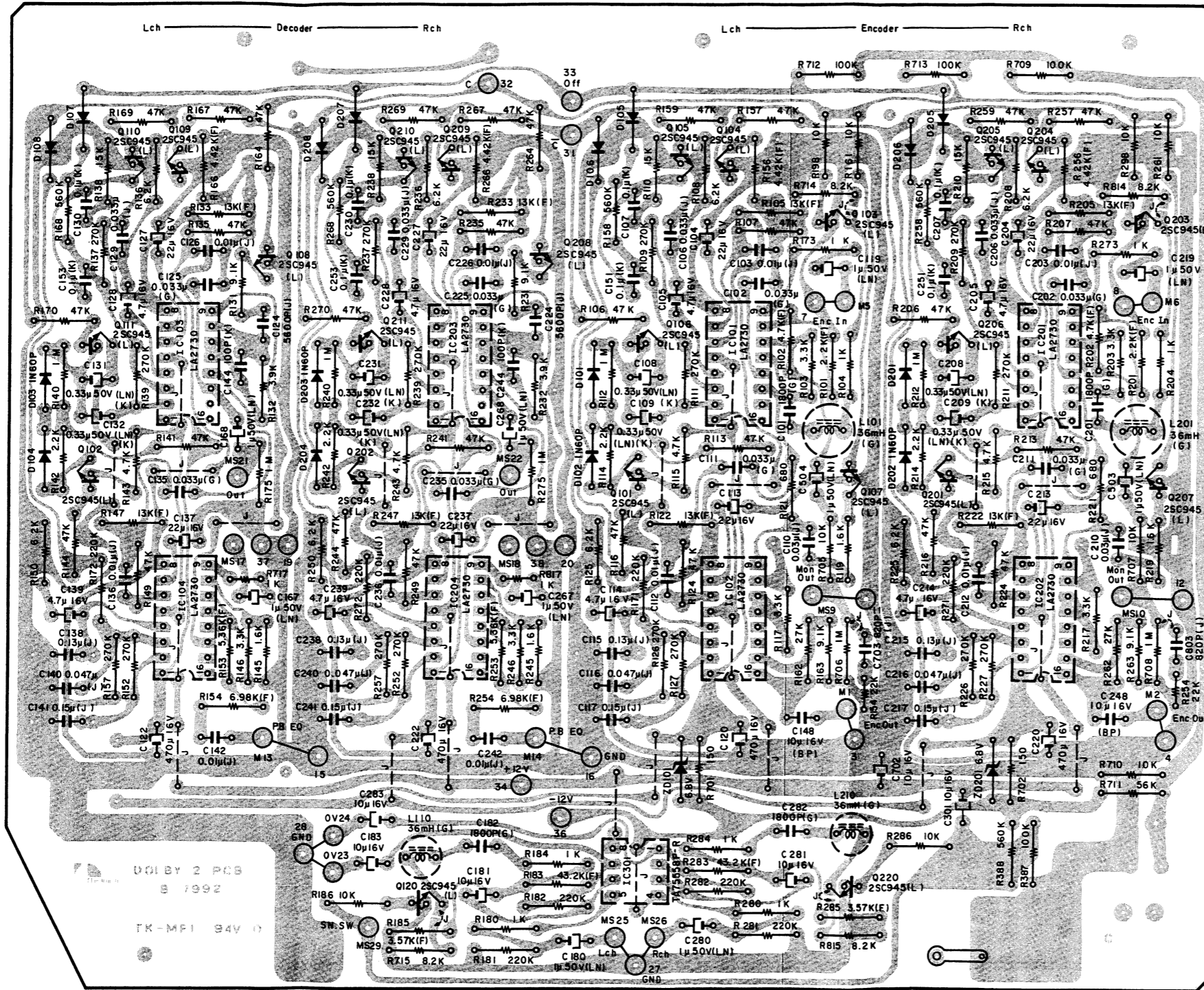


Fig. 7.10.2.1 Serial No.: A12302901 -

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.

Schematic Ref. No.	Part No.	Description
	<b>BA04645A</b>	<b>Dolby NR P.C.B. Ass'y (UK, Australia, 220V Class 2, Others &amp; Japan)</b> Serial No.: A12302901 -
	- PB Dolby NR -	
IC103,104	OB06338A	IC LA2730
203,204		
Q102,108	OB01872A	Transistor 2SC945 (L)
109,110		
111,202		
208,209		
210,211		
D103,203	OB00030A	Germanium Diode 1N60P
D104,107	OB01909A	Silicon Diode 1S1555
108,204		
207,208		
R131,231	OB05694A	Carbon Resistor 9.1K ERD-25T J
R132,232	OB05675A	Carbon Resistor 3.9K ERD-25T J
R133,147	OB09557A	Metal Film Resistor 13K SN14K2E F
233,247		
R135,141	OB05641A	Carbon Resistor 47K ERD-25T J
144,149		
164,167		
169,170		
235,241		
244,249		
264,267		
269,270		
R136,150	OB09271A	Carbon Resistor 6.2K ERD-25T J
236,250		
R137,139	OB05620A	Carbon Resistor 270K ERD-25T J
152,157		
237,239		
252,257		
R138,238	OB05591A	Carbon Resistor 15K ERD-25T J
R140,175	OB05776A	Carbon Resistor 1M ERD-25T J
240,275		
R142,242	OB05622A	Carbon Resistor 2.2K ERD-25T J
R143,243	OB01846A	Carbon Resistor 4.7K ERD-25T J
R145,245	OB09565A	Carbon Resistor 1.6K ERD-25T J
R146,246	OB01681A	Carbon Resistor 3.3K ERD-25T J
R153,253	OB09426A	Metal Film Resistor 5.36K SN14K2E F
R154,254	OB09604A	Metal Film Resistor 6.98K SN14K2E F
R166,266	OB09558A	Metal Film Resistor 4.42K SN14K2E F
R168,268	OB05784A	Carbon Resistor 560K ERD-25T J
R172,272	OB05625A	Carbon Resistor 220K ERD-25T J
R171,817	OB01857A	Carbon Resistor 1K ERD-25T J
C122,222	OB01392A	Electrolytic Capacitor 470μ 16V
C124,224	OB05659A	Mylar Capacitor 5600P 50V J
C125,135	OB09240A	PP Capacitor 0.033μ 100V G
225,235		
C126,136	OB05681A	Mylar Capacitor 0.01μ 50V J
142,226		
236,242		
C127,137	OB01862A	Electrolytic Capacitor 22μ 16V
227,237		
C128,139	OB01389A	Electrolytic Capacitor 4.7μ 16V
228,239		
C129,229	OB05583A	Mylar Capacitor 0.033μ 50V J
C130,153	OB01603A	Mylar Capacitor 0.1μ 50V K
230,253		

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
C131,132 231,232	OB09567A	Electrolytic Capacitor 0.33 $\mu$ 50V (LN) K	R163,263	OB05694A	Carbon Resistor 9.1K ERD-25T J
C138,238	OB09566A	Mylar Capacitor 0.13 $\mu$ 50V J	R171,271	OB05625A	Carbon Resistor 220K ERD-25T J
C140,240	OB05796A	Mylar Capacitor 0.047 $\mu$ 50V J	R701,702	OB09213A	Fail Safe Type Resistor 150 RDF-25S J
C141,241	OB05914A	Mylar Capacitor 0.15 $\mu$ 50V J	R714,814	OB01856A	Carbon Resistor 8.2K ERD-25T J
C144,244	OB09282A	Ceramic Capacitor 100P 50V K	C101,201	OB09409A	PP Capacitor 1800P 100V G
C167,168 267,268	OB09494A	Electrolytic Capacitor 1 $\mu$ 50V (LN)	C102,111	OB09240A	PP Capacitor 0.033 $\mu$ 100V G
	OB08714A	IC Socket 16P (4 pcs.)	C103,112	OB05681A	Mylar Capacitor 0.01 $\mu$ 50V J
	OE00037A	Earth Lug B-5 (1 pce.)	C203,212		
	- Rec. Dolby NR -		C104,113	OB01862A	Electrolytic Capacitor 22 $\mu$ 16V
IC101,102 201,202	OB06338A	IC LA2730	C204,213	OB01389A	Electrolytic Capacitor 4.7 $\mu$ 16V
Q101,103 104,105 106,107 201,203 204,205 206,207	OB01872A	Transistor 2SC945 (L)	C105,114		
ZD101,201	OB06315A	Zener Diode 6.8V XZ068	C205,214		
D101,105 106,201 205,206	OB01909A	Silicon Diode 1S1555	C106,206	OB05583A	Mylar Capacitor 0.033 $\mu$ 50V J
D102,202	OB00030A	Germanium Diode 1N60P	C107,151	OB01603A	Mylar Capacitor 0.1 $\mu$ 50V K
L101,201	OB06676A	Inductor 36mH G	C207,251		
R101,201	OB09201A	Metal Film Resistor 2.2K SN14K2E F	C108,109	OB09567A	Electrolytic Capacitor 0.33 $\mu$ 50V (LN) K
R102,202	OB09356A	Metal Film Resistor 4.7K SN14K2E F	C208,209		
R103,117 203,217	OB01681A	Carbon Resistor 3.3K ERD-25T J	C110,210	OB09594A	Mylar Capacitor 0.03 $\mu$ 50V J
R104,173 204,273	OB01857A	Carbon Resistor 1K ERD-25T J	C115,215	OB09566A	Mylar Capacitor 0.13 $\mu$ 50V J
R105,122 205,222	OB09557A	Metal Film Resistor 13K SN14K2E F	C116,216	OB05796A	Mylar Capacitor 0.047 $\mu$ 50V J
R106,107 113,116 124,157 159,206 207,213 216,224 257,259	OB05641A	Carbon Resistor 47K ERD-25T J	C117,217	OB05914A	Mylar Capacitor 0.15 $\mu$ 50V J
R108,125 208,225	OB09271A	Carbon Resistor 6.2K ERD-25T J	C119,219	OB09223A	Electrolytic Capacitor 1 $\mu$ 50V (LN)
R109,111 126,127 209,211 226,227	OB05620A	Carbon Resistor 270K ERD-25T J	503,504		
R110,210	OB05591A	Carbon Resistor 15K ERD-25T J	C120,220	OB01392A	Electrolytic Capacitor 470 $\mu$ 16V
R112,212 706,708	OB05776A	Carbon Resistor 1M ERD-25T J	C148,248	OB09163A	Electrolytic Capacitor 10 $\mu$ 16V (BP)
R114,214	OB05622A	Carbon Resistor 2.2K ERD-25T J	C703,803	OB09783A	PP Capacitor 820P 100V J
R115,215	OB01846A	Carbon Resistor 4.7K ERD-25T J		OB08714A	IC Socket 16P (4 pcs.)
R119,219	OB09565A	Carbon Resistor 1.6K ERD-25T J		- Line Amp. -	
R121,221	OB05794A	Carbon Resistor 680 ERD-25T J	IC301	OB06287A	IC TA75558P-R
R154,254	OB05615A	Carbon Resistor 22K ERD-25T J	Q120,220	OB01872A	Transistor 2SC945 (L)
R156,256	OB09558A	Metal Film Resistor 4.42K SN14K2E F	L110,210	OB06676A	Inductor 36mH G
R158,258	OB05784A	Carbon Resistor 560K ERD-25T J	R180,184	OB01857A	Carbon Resistor 1K ERD-25T J
R161,198 261,298 705,707	OB01888A	Carbon Resistor 10K ERD-25T J	280,284		
R162,262	OB05743A	Carbon Resistor 27K ERD-25T J	R181,182	OB05625A	Carbon Resistor 220K ERD-25T J
			281,282		
			R183,283	OB09582A	Metal Film Resistor 43.2K SN14K2E F
			R185,285	OB09507A	Metal Film Resistor 3.57K SN14K2E F
			R186,286	OB01888A	Carbon Resistor 10K ERD-25T J
			710		
			R387,709	OB01889A	Carbon Resistor 100K ERD-25T J
			712,713		
			R388	OB05784A	Carbon Resistor 560K ERD-25T J
			R711	OB05508A	Carbon Resistor 56K ERD-25T J
			R715,815	OB01856A	Carbon Resistor 8.2K ERD-25T J
			C180,280	OB09223A	Electrolytic Capacitor 1 $\mu$ 50V (LN)
			C181,183	OB01412A	Electrolytic Capacitor 10 $\mu$ 16V
			281,283		
			301,702		
			C182,282	OB09409A	PP Capacitor 1800P 100V G
				- Miscellaneous -	
				OB07992C	Dolby NR P.C.B.

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
	<b>BA04645A</b>	<b>Dolby NR P.C.B. Ass'y (UK, Australia, 220V Class 2, Others &amp; Japan)</b> Serial Nos.: A12301001 – A12302900	C131,132 231,232 C138,238 C140,240 C141,241 C144,244 C167,168 267,268	OB09567A OB09566A OB05796A OB05914A OB09282A OB09494A	Electrolytic Capacitor 0.33 $\mu$ 50V (LN) K Mylar Capacitor 0.13 $\mu$ 50V J Mylar Capacitor 0.047 $\mu$ 50V J Mylar Capacitor 0.15 $\mu$ 50V J Ceramic Capacitor 100P 50V K Electrolytic Capacitor 1 $\mu$ 50V (LN)
		<b>– PB Dolby NR –</b>			
IC103,104 203,204	OB06338A	IC LA2730			
Q102,108 109,110 111,202 208,209 210,211	OB01872A	Transistor 2SC945 (L)			
D103,203 D104,107 108,204 207,208	OB00030A OB01909A	Germanium Diode 1N60P Silicon Diode 1S1555	IC101,102 201,202 Q101,103 104,105 106,107 201,203 204,205 206,207	OB06338A OB01872A	IC LA2730 Transistor 2SC945 (L)
R131,231 R132,232 R133,147 233,247 R135,141 144,149 164,167 169,170 235,241 244,249 264,267 269,270	OB05694A OB05675A OB09557A OB05641A	Carbon Resistor 9.1K ERD-25T J Carbon Resistor 3.9K ERD-25T J Metal Film Resistor 13K SN14K2E F Carbon Resistor 47K ERD-25T J	ZD101,201 D101,105 106,201 205,206 D102,202 L101,201 R101,201 R102,202 R103,117 203,217 R104,173 204,273 R105,122 205,222 R106,107 113,116 124,157 159,206 207,213 216,224 257,259	OB06315A OB01909A OB00030A OB06676A OB09201A OB09356A OB01681A OB01857A OB09557A OB05641A	Zener Diode 6.8V XZ068 Silicon Diode 1S1555 Germanium Diode 1N60P Inductor 36mH G Metal Film Resistor 2.2K SN14K2E F Metal Film Resistor 4.7K SN14K2E F Carbon Resistor 3.3K ERD-25T J Carbon Resistor 1K ERD-25T J Metal Film Resistor 13K SN14K2E F Carbon Resistor 47K ERD-25T J
R136,150 236,250 R137,139 152,157 237,239 252,257 R138,238 R140,175 240,275 R142,242 R143,243 R145,245 R146,246 R153,253 R154,254 R166,266 R168,268 R172,272 R177,817 C122,222 C124,224 C125,135 225,235 C126,136 142,226 236,242 C127,137 227,237 C128,139 228,239 C129,229 C130,153 230,253	OB09271A OB05620A OB05591A OB05776A OB05622A OB01846A OB09565A OB01681A OB09426A OB09604A OB09558A OB05784A OB05625A OB01857A OB01392A OB05659A OB09240A OB05681A OB01862A OB01389A OB05583A OB01603A	Carbon Resistor 6.2K ERD-25T J Carbon Resistor 270K ERD-25T J Carbon Resistor 15K ERD-25T J Carbon Resistor 1M ERD-25T J Carbon Resistor 2.2K ERD-25T J Carbon Resistor 4.7K ERD-25T J Carbon Resistor 1.6K ERD-25T J Carbon Resistor 3.3K ERD-25T J Metal Film Resistor 5.36K SN14K2E F Metal Film Resistor 6.98K SN14K2E F Metal Film Resistor 4.42K SN14K2E F Carbon Resistor 560K ERD-25T J Carbon Resistor 220K ERD-25T J Carbon Resistor 1K ERD-25T J Electrolytic Capacitor 470 $\mu$ 16V Mylar Capacitor 5600P 50V J PP Capacitor 0.033 $\mu$ 100V G Mylar Capacitor 0.01 $\mu$ 50V J Electrolytic Capacitor 22 $\mu$ 16V Electrolytic Capacitor 4.7 $\mu$ 16V Mylar Capacitor 0.033 $\mu$ 50V J Mylar Capacitor 0.1 $\mu$ 50V K	R108,125 208,225 R109,111 126,127 209,211 226,227 R110,210 R112,212 706,708 R114,214 R115,215 R119,219 R121,221 R154,254 R156,256 R158,258 R161,198 261,298 705,707 R162,262	OB09271A OB05620A OB05591A OB05776A OB05622A OB01846A OB09565A OB05794A OB05615A OB09558A OB05784A OB01888A OB05743A	Carbon Resistor 6.2K ERD-25T J Carbon Resistor 270K ERD-25T J Carbon Resistor 15K ERD-25T J Carbon Resistor 1M ERD-25T J Carbon Resistor 2.2K ERD-25T J Carbon Resistor 4.7K ERD-25T J Carbon Resistor 1.6K ERD-25T J Carbon Resistor 680 ERD-25T J Carbon Resistor 22K ERD-25T J Metal Film Resistor 4.42K SN14K2E F Carbon Resistor 560K ERD-25T J Carbon Resistor 10K ERD-25T J Carbon Resistor 27K ERD-25T J
		<b>– Rec. Dolby NR –</b>			

Schematic Ref. No.	Part No.	Description
R163,263	OB05694A	Carbon Resistor 9.1K ERD-25T J
R171,271	OB05625A	Carbon Resistor 220K ERD-25T J
R701,702	OB09213A	Fail Safe Type Resistor 150 RDF-25S J
R714,814	OB01856A	Carbon Resistor 8.2K ERD-25T J
C101,201	OB09409A	PP Capacitor 1800P 100V G
C102,111	OB09240A	PP Capacitor 0.033μ 100V G
202,211		
C103,112	OB05681A	Mylar Capacitor 0.01μ 50V J
203,212		
C104,113	OB01862A	Electrolytic Capacitor 22μ 16V
204,213		
C105,114	OB01389A	Electrolytic Capacitor 4.7μ 16V
205,214		
C106,206	OB05583A	Mylar Capacitor 0.033μ 50V J
C107,151	OB01603A	Mylar Capacitor 0.1μ 50V K
207,251		
C108,109	OB09567A	Electrolytic Capacitor 0.33μ 50V (LN) K
208,209		
C110,210	OB09594A	Mylar Capacitor 0.03μ 50V J
C115,215	OB09566A	Mylar Capacitor 0.13μ 50V J
C116,216	OB05796A	Mylar Capacitor 0.047μ 50V J
C117,217	OB05914A	Mylar Capacitor 0.15μ 50V J
C119,219	OB09223A	Electrolytic Capacitor 1μ 50V (LN)
503,504		
C120,220	OB01392A	Electrolytic Capacitor 470μ 16V
C148,248	OB09163A	Electrolytic Capacitor 10μ 16V (BP)
C703,803	OB09783A	PP Capacitor 820P 100V J
	OB08714A	IC Socket 16P (4 pcs.)
- Line Amp. -		
IC301	OB06287A	IC TA75558P-R
Q120,220	OB01872A	Transistor 2SC945 (L)
L110,210	OB06676A	Inductor 36mH G
R180,184	OB01857A	Carbon Resistor 1K ERD-25T J
280,284		
R181,182	OB05625A	Carbon Resistor 220K ERD-25T J
281,282		
R183,283	OB09582A	Metal Film Resistor 43.2K SN14K2E F
R185,285	OB09507A	Metal Film Resistor 3.57K SN14K2E F
R186,286	OB01888A	Carbon Resistor 10K ERD-25T J
710		
R387,709	OB01889A	Carbon Resistor 100K ERD-25T J
712,713		
R388	OB05784A	Carbon Resistor 560K ERD-25T J
R711	OB05508A	Carbon Resistor 56K ERD-25T J
R715,815	OB01856A	Carbon Resistor 8.2K ERD-25T J
C180,280	OB09223A	Electrolytic Capacitor 1μ 50V (LN)
C181,183	OB01412A	Electrolytic Capacitor 10μ 16V
281,283		
301,702		
C182,282	OB09409A	PP Capacitor 1800P 100V G
- Miscellaneous -		
OB07992A		Dolby NR P.C.B.

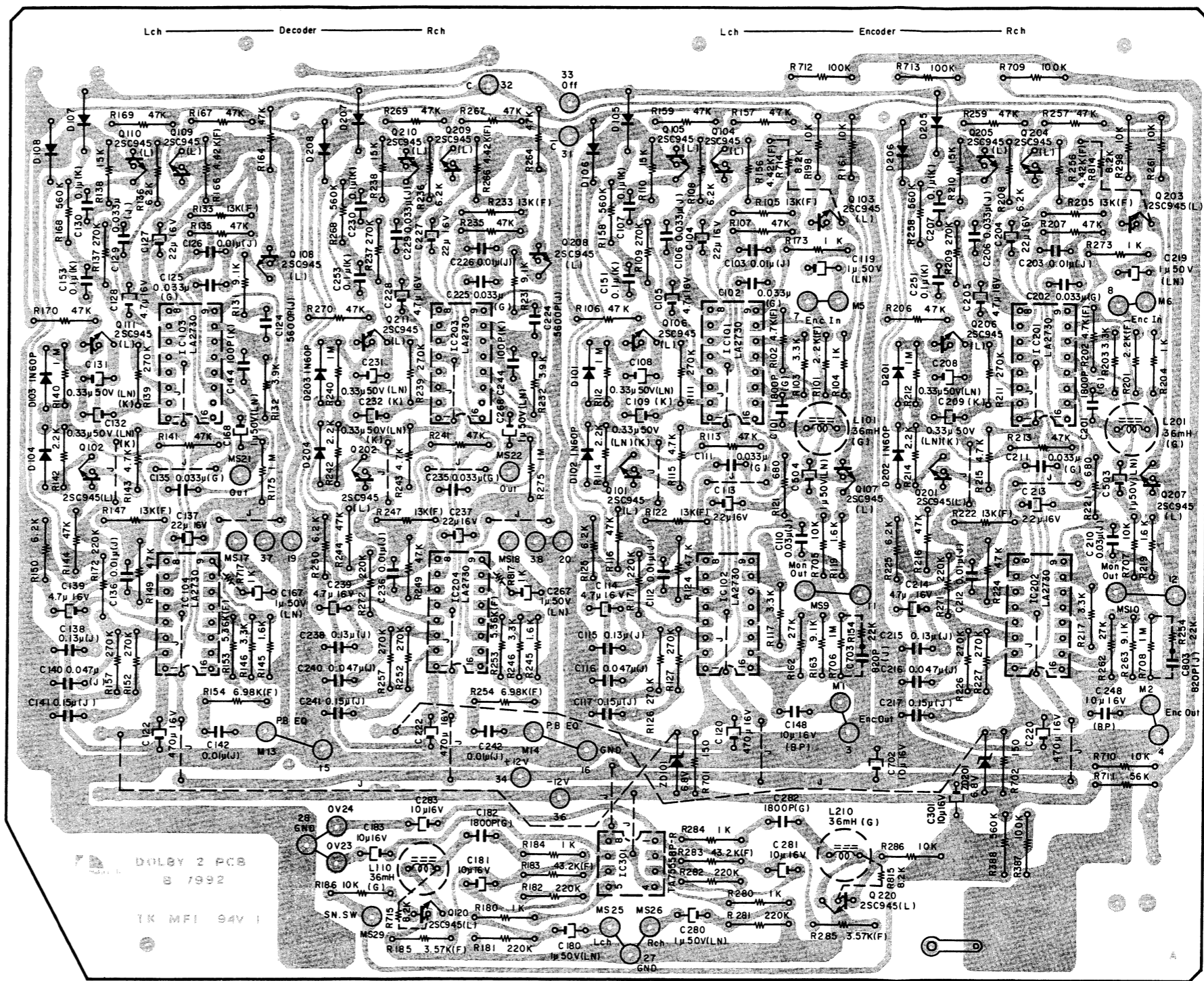


Fig. 7.10.2.2 Serial Nos.: A12301001 - A12302900

Note: Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.

7.11. Logic & Power P.C.B. Ass'y

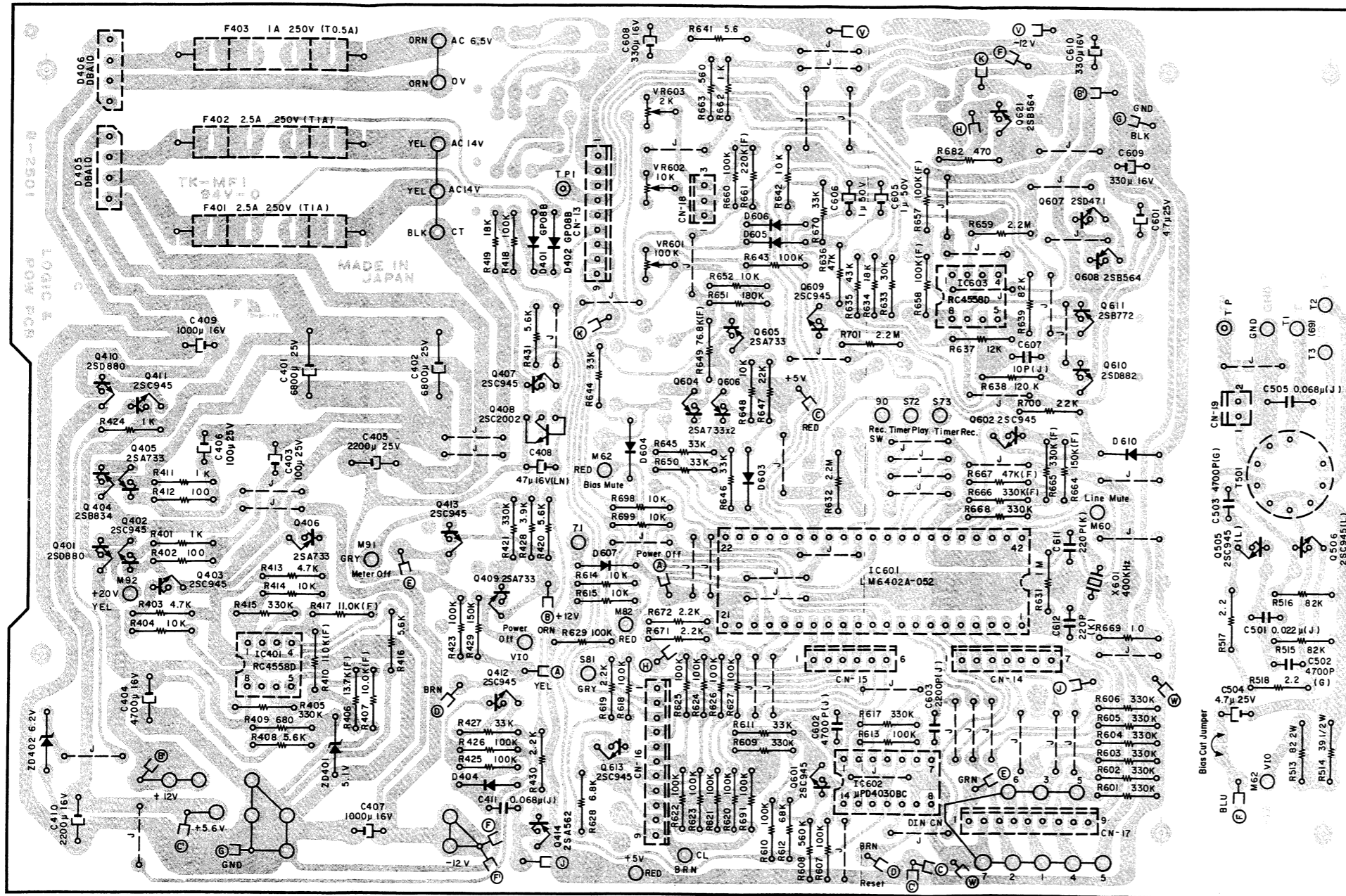


Fig. 7.11.1 Serial No.: A12302901 -

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.

Schematic Ref. No.	Part No.	Description
	BA04641A	Logic & Power P.C.B. Ass'y (U.S.A., Canada & Others)
	BA04582A	Logic & Power P.C.B. Ass'y (Japan)
	BA04581A	Logic & Power P.C.B. Ass'y (UK, Australia & 220V Class 2)
		Serial No.: A12302901 -
	- Bias Osc. -	
Q505,506	OB01872A	Transistor 2SC945 (L)
T501	OB06613A	Osc. Coil
R513	OB09295A	Fail Safe Type Resistor 82 RSF-2B J
R514	OB09296A	Fail Safe Type Resistor 39 RSF-1/2B J
R515,516	OB05668A	Carbon Resistor 82K ERD-25T J
R517,518	OB09212A	Fail Safe Type Resistor 2.2RDF-25S J
C501	OB09405A	PP Capacitor 0.022μ 100V J
C502,503	OB09191A	PP Capacitor 4700P 100V G
C504	OB01402A	Electrolytic Capacitor 4.7μ 25V
C505	OB09254A	PP Capacitor 0.068μ 100V J
CN19	OB08656A	2P-T Post
	OJ04450A	Osc. Coil Cap (1 pce.)
	- Power Supply -	
IC401	OB06124B	IC RC4558D
Q402,403	OB06100A	Transistor 2SC945 (A)
407,411		412,413
Q405,406	OB06013A	Transistor 2SA733
409		
Q408	OB06322A	Transistor 2SC2002
Q414	OB01426A	Transistor 2SA562
ZD401	OB06058A	Zener Diode 5.1V YZ051
ZD402	OB06314A	Zener Diode 6.2V YZ062
D401,402	OB06109A	Silicon Diode GP08B
D404	OB01909A	Silicon Diode 1S1555
D405,406	OB06282A	Diode Bridge DBA10
R401,411	OB01857A	Carbon Resistor 1K ERD-25T J
424		
R402,412	OB01679A	Carbon Resistor 100 ERD-25T J
R403,413	OB01846A	Carbon Resistor 4.7K ERD-25T J
R404,414	OB01888A	Carbon Resistor 10K ERD-25T J
R405,415	OB05627A	Carbon Resistor 330K ERD-25T J
421		
R406	OB09523A	Metal Film Resistor 13.7K SN14K2E F
R407	OB09203A	Metal Film Resistor 10K SN14K2E F
R408,416	OB01887A	Carbon Resistor 5.6K ERD-25T J
420,431		
R409	OB05794A	Carbon Resistor 680 ERD-25T J
R410,417	OB09128A	Metal Film Resistor 11K SN14K2E F
R418,423	OB01889A	Carbon Resistor 100K ERD-25T J
425,426		
R419	OB05560A	Carbon Resistor 18K ERD-25T J
R427	OB05509A	Carbon Resistor 33K ERD-25T J
R428	OB05675A	Carbon Resistor 3.9K ERD-25T J
R429	OB05626A	Carbon Resistor 150K ERD-25T J
R430	OB05622A	Carbon Resistor 2.2K ERD-25T J
C401,402	OB09374A	Electrolytic Capacitor 6800μ 25V
C403,406	OB01272A	Electrolytic Capacitor 100μ 25V
C404	OB09377A	Electrolytic Capacitor 4700μ 16V
C405	OB05654A	Electrolytic Capacitor 2200μ 25V
C407,409	OB01397A	Electrolytic Capacitor 1000μ 16V
C408	OB09218A	Electrolytic Capacitor 47μ 16V (LN)
C410	OB01406A	Electrolytic Capacitor 2200μ 16V

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
C411	OB05682A OB08515A	Mylar Capacitor 0.068μ 50V J Insu-Lock (2 pcs.)	R665,666	OB09756A	Metal Film Resistor 330K SN14K2E F
	— Logic —		R667	OB09451A	Metal Film Resistor 47K SN14K2E F
IC601	OB06324A	IC LM6402A-052	R669	OB09216A	Fail Safe Type Resistor 10 RDF-25S J
IC602	OB06317A	IC μPD4030BC	R682	OB05576A	Carbon Resistor 470 ERD-25T J
IC603	OB06124B	IC RC4558D	C601	OB01402A	Electrolytic Capacitor 4.7μ 25V
Q601,602	OB06100A	Transistor 2SC945 (A)	C602	OB05652A	Mylar Capacitor 4700P 50V J
609,613			C603	OB01802A	Mylar Capacitor 2200P 50V J
Q604,605	OB06013A	Transistor 2SA733	C605,606	OB01405A	Electrolytic Capacitor 1μ 50V
606			C607	OB09277A	Ceramic Capacitor 10P 50V J
Q607	OB06066A	Transistor 2SD471	C608,609	OB01502A	Electrolytic Capacitor 330μ 16V
Q608,621	OB06069A	Transistor 2SB564	C611,612	OB09283A	Ceramic Capacitor 220P 50V K
Q610	OB06316A	Transistor 2SD882	CN13,16	OB08645A	9P-T Post
Q611	OB06303A	Transistor 2SB772	17		
D603,604	OB01909A	Silicon Diode 1S1555	CN14	OB08643A	7P-T Post
605,606			CN15	OB08642A	6P-T Post
607,610			CN18	OB08653A	3P-T Post
X601	OB08908A	Crystal 400kHz 4BR400BT		OB08964A	Transistor Mica TO-126 (2 pcs.)
VR601	OB07257A	Semi-fixed Volume 100K		OE00507A	Nut Hex. M3 (2 pcs.)
VR602	OB07256A	Semi-fixed Volume 10K		OE00624A	Screw M3x10 Philips Pan Head (2A)
VR603	OB07329A	Semi-fixed Volume 2K			(1 pce.)
R601,602	OB05627A	Carbon Resistor 330K ERD-25T J		OJ04485A	Heat Sink B (1 pce.)
603,604				OM04222A	Label CN-15 (1 pce.)
605,606				OM04223A	Label CN-16 (1 pce.)
609,617				OM04224A	Label CN-17 (1 pce.)
668				OM04230A	Label CN-13 (1 pce.)
R607,610	OB01889A	Carbon Resistor 100K ERD-25T J (16 pcs.)		OM04231A	Label CN-14 (1 pce.)
613,618				— Miscellaneous —	
620-627			F401,402	OB02501C	Logic & Power P.C.B.
629,643				OB08962A	Fuse 2.5A 250V (U.S.A., Canada & Others)
660,691			F401,402	OB08961A	Fuse 2.5A 250V (Japan)
R608	OB05784A	Carbon Resistor 560K ERD-25T J	F401,402	OB08347U	Fuse T1A 250V (UK, Australia & 220V Class 2)
R611,644	OB05509A	Carbon Resistor 33K ERD-25T J	F403	OB08374A	Fuse 1A 250V (U.S.A., Canada & Others)
645,646			F403	OB08686A	Fuse 1A 250V (Japan)
650,670			F403	OB08960A	Fuse T500mA 250V (UK, Australia & 220V Class 2)
R612	OB05692A	Carbon Resistor 68K ERD-25T J		OB08349A	Fuse Clip (UK, Australia & 220V Class 2)
R614,615	OB01888A	Carbon Resistor 10K ERD-25T J		OE00037A	Earth Lug B-5 (6 pcs.)
642,648				OE00857A	BT Screw M3x6 Philips Binding Head (1 pce.)
652,698				OM03782A	Fuse Label 1A 250V (U.S.A., Canada, Japan & Others) (2 pcs.)
699				OM04096C	Fuse Label T500mA (UK, Australia & 220V Class 2) (1 pce.)
R619,671	OB05622A	Carbon Resistor 2.2K ERD-25T J		OM04191A	Fuse Label T1A 250V (UK, Australia & 220V Class 2) (2 pcs.)
672			Q401,410	OB06255A	Transistor 2SD880 (Y)
R628	OB01682A	Carbon Resistor 6.8K ERD-25T J	Q404	OB06256A	Transistor 2SB834 (Y, GR)
R631	OB05776A	Carbon Resistor 1M ERD-25T J		OB08601A	Transistor Mica TO-220 (3 pcs.)
R632,659	OB05671A	Carbon Resistor 2.2M ERD-25T J		OB08602A	Transistor Bushing TO-220 (3 pcs.)
701				OE00507A	Nut Hex. M3 (3 pcs.)
R633	OB09075A	Carbon Resistor 30K ERD-25T J		OE00608A	Screw M3x10 Philips Pan Head (3A)
R634	OB05560A	Carbon Resistor 18K ERD-25T J			(3 pcs.)
R635	OB09750A	Carbon Resistor 43K ERD-25T J		OJ04526A	Heat Sink (1 pce.)
R636	OB05641A	Carbon Resistor 47K ERD-25T J			
R637	OB09263A	Carbon Resistor 12K ERD-25T J			
R638	OB05621A	Carbon Resistor 120K ERD-25T J			
R639	OB05668A	Carbon Resistor 82K ERD-25T J			
R641	OB09217A	Fail Safe Type Resistor 5.6RDF-25S J			
R647,700	OB05615A	Carbon Resistor 22K ERD-25T J			
R649	OB09751A	Metal Film Resistor 76.8K SN14K2E F			
R651	OB05640A	Carbon Resistor 180K ERD-25T J			
R657,658	OB09269A	Metal Film Resistor 100K SN14K2E F			
R661	OB09472A	Metal Film Resistor 220K SN14K2E F			
R662	OB01857A	Carbon Resistor 1K ERD-25T J			
R663	OB05575A	Carbon Resistor 560 ERD-25T J			
R664	OB09300A	Metal Film Resistor 150K SN14K2E F			

\*: Depends on the versions.

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
	BA04641A	Logic & Power P.C.B. Ass'y (U.S.A., Canada & Others)	C411	OB05682A	Mylar Capacitor 0.068μ 50V J
	BA04582A	Logic & Power P.C.B. Ass'y (Japan)		OB08515A	Insu-Lock (2 pcs.)
	BA04581A	Logic & Power P.C.B. Ass'y (UK, Australia & 220V Class 2) Serial Nos.: A12301001 - A12302900		- Logic -	
	- Bias Osc. -		IC601	OB06324A	IC LM6402A-052
Q505,506	OB01872A	Transistor 2SC945 (L)	IC602	OB06317A	IC μPD4030BC
T501	OB06613A	Osc. Coil	IC603	OB06124B	IC RC4558D
R513	OB09295A	Fail Safe Type Resistor 82 RSF-2B J	Q601,602	OB06100A	Transistor 2SC945 (A)
R514	OB09296A	Fail Safe Type Resistor 39 RSF-1/2B J	609,613		
R515,516	OB05668A	Carbon Resistor 82K ERD-25T J	Q604,605	OB06013A	Transistor 2SA733
R517,518	OB09212A	Fail Safe Type Resistor 2.2RDF-25S J	606		
C501	OB09405A	PP Capacitor 0.022μ 100V J	Q607	OB06066A	Transistor 2SD471
C502,503	OB09191A	PP Capacitor 4700P 100V G	Q608,621	OB06069A	Transistor 2SB564
C504	OB01402A	Electrolytic Capacitor 4.7μ 25V	Q610	OB06316A	Transistor 2SD882
C505	OB09254A	PP Capacitor 0.068μ 100V J	Q611	OB06303A	Transistor 2SB772
CN19	OB08656A	2P-T Post	D603,604	OB01909A	Silicon Diode 1S1555
	0J04450A	Osc. Coil Cap (1 pce.)	605,606		
	- Power Supply -		607,610		
IC401	OB06124B	IC RC4558D	X601	OB08908A	Crystal 400kHz 4BR400BT
Q402,403	OB06100A	Transistor 2SC945 (A)	VR601	OB07257A	Semi-fixed Volume 100K
407,411			VR602	OB07256A	Semi-fixed Volume 10K
412,413			VR603	OB07329A	Semi-fixed Volume 2K
Q405,406	OB06013A	Transistor 2SA733	R601,602	OB05627A	Carbon Resistor 330K ERD-25T J
409			603,604		
Q408	OB06322A	Transistor 2SC2002	605,606		
Q414	OB01426A	Transistor 2SA562	609,617		
ZD401	OB06058A	Zener Diode 5.1V YZ051	668		
ZD402	OB06314A	Zener Diode 6.2V YZ062	R607,610	OB01889A	Carbon Resistor 100K ERD-25T J
D401,402	OB06109A	Silicon Diode GP08B	613,618		(16 pcs.)
D404	OB01909A	Silicon Diode 1S1555	620-627		
D405,406	OB06282A	Diode Bridge DBA10	629,643		
R401,411	OB01857A	Carbon Resistor 1K ERD-25T J	660,691		
424			R608	OB05784A	Carbon Resistor 560K ERD-25T J
R402,412	OB01679A	Carbon Resistor 100 ERD-25T J	R611,644	OB05509A	Carbon Resistor 33K ERD-25T J
R403,413	OB01846A	Carbon Resistor 4.7K ERD-25T J	645,646		
R404,414	OB01888A	Carbon Resistor 10K ERD-25T J	650,670		
R405,415	OB05627A	Carbon Resistor 330K ERD-25T J	R612	OB05692A	Carbon Resistor 68K ERD-25T J
421			R614,615	OB01888A	Carbon Resistor 10K ERD-25T J
R406	OB09523A	Metal Film Resistor 13.7K SN14K2E F	642,648		
R407	OB09203A	Metal Film Resistor 10K SN14K2E F	652,698		
R408,416	OB01887A	Carbon Resistor 5.6K ERD-25T J	699		
420,431			R619,671	OB05622A	Carbon Resistor 2.2K ERD-25T J
R409	OB05794A	Carbon Resistor 680 ERD-25T J	672		
R410,417	OB09128A	Metal Film Resistor 11K SN14K2E F	R628	OB01682A	Carbon Resistor 6.8K ERD-25T J
R418,423	OB01889A	Carbon Resistor 100K ERD-25T J	R631	OB05776A	Carbon Resistor 1M ERD-25T J
425,426			R632,659	OB05671A	Carbon Resistor 2.2M ERD-25T J
R419	OB05560A	Carbon Resistor 18K ERD-25T J	701		
R427	OB05509A	Carbon Resistor 33K ERD-25T J	R633	OB09075A	Carbon Resistor 30K ERD-25T J
R428	OB05675A	Carbon Resistor 3.9K ERD-25T J	R634	OB05560A	Carbon Resistor 18K ERD-25T J
R429	OB05626A	Carbon Resistor 150K ERD-25T J	R635	OB09750A	Carbon Resistor 43K ERD-25T J
R430	OB05622A	Carbon Resistor 2.2K ERD-25T J	R636	OB05641A	Carbon Resistor 47K ERD-25T J
C401,402	OB09374A	Electrolytic Capacitor 6800μ 25V	R637	OB09263A	Carbon Resistor 12K ERD-25T J
C403,406	OB01272A	Electrolytic Capacitor 100μ 25V	R638	OB05621A	Carbon Resistor 120K ERD-25T J
C404	OB09377A	Electrolytic Capacitor 4700μ 16V	R639	OB05668A	Carbon Resistor 82K ERD-25T J
C405	OB05654A	Electrolytic Capacitor 2200μ 25V	R641	OB09217A	Fail Safe Type Resistor 5.6RDF-25S J
C407,409	OB01397A	Electrolytic Capacitor 1000μ 16V	R647,700	OB05615A	Carbon Resistor 22K ERD-25T J
C408	OB09251A	Electrolytic Capacitor 33μ 16V	R649	OB09751A	Metal Film Resistor 76.8K SN14K2E F
C410	OB01406A	Electrolytic Capacitor 2200μ 16V	R651	OB05640A	Carbon Resistor 180K ERD-25T J
			R657,658	OB09269A	Metal Film Resistor 100K SN14K2E F
			R661	OB09472A	Metal Film Resistor 220K SN14K2E F
			R662	OB01857A	Carbon Resistor 1K ERD-25T J
			R663	OB05575A	Carbon Resistor 560 ERD-25T J
			R664	OB09300A	Metal Film Resistor 150K SN14K2E F



Schematic Ref. No.	Part No.	Description
R665,666	0B09756A	Metal Film Resistor 330K SN14K2E F
R667	0B09451A	Metal Film Resistor 47K SN14K2E F
R669	0B09216A	Fail Safe Type Resistor 10 RDF-25S J
R682	0B05576A	Carbon Resistor 470 ERD-25T J
C601	0B01402A	Electrolytic Capacitor 4.7μ 25V
C602	0B05652A	Mylar Capacitor 4700P 50V J
C603	0B01802A	Mylar Capacitor 2200P 50V J
C605,606	0B01405A	Electrolytic Capacitor 1μ 50V
C607	0B09277A	Ceramic Capacitor 10P 50V J
C608,609	0B01502A	Electrolytic Capacitor 330μ 16V
610		
C611,612	0B09283A	Ceramic Capacitor 220P 50V K
CN13,16	0B08645A	9P-T Post
17		
CN14	0B08643A	7P-T Post
CN15	0B08642A	6P-T Post
CN18	0B08653A	3P-T Post
	0B08964A	Transistor Mica TO-126 (2 pcs.)
	0E00507A	Nut Hex. M3 (2 pcs.)
	0E00624A	Screw M3x10 Philips Pan Head (2A) (1 pce.)
	0J04485A	Heat Sink B (1 pce.)
	0M04222A	Label CN-15 (1 pce.)
	0M04223A	Label CN-16 (1 pce.)
	0M04224A	Label CN-17 (1 pce.)
	0M04230A	Label CN-13 (1 pce.)
	0M04231A	Label CN-14 (1 pce.)
	— Miscellaneous —	
F401,402	0B02501A	Logic & Power P.C.B.
	0B08962A	Fuse 2.5A 250V (U.S.A., Canada & Others)
F401,402	0B08961A	Fuse 2.5A 250V (Japan)
F401,402	0B08347U	Fuse T1A 250V (UK, Australia & 220V Class 2)
F403	0B08374A	Fuse 1A 250V (U.S.A., Canada & Others)
F403	0B08686A	Fuse 1A 250V (Japan)
F403	0B08960A	Fuse T500mA 250V (UK, Australia & 220V Class 2)
	0B08349A	Fuse Clip (UK, Australia & 220V Class 2) (6 pcs.)
	0E00037A	Earth Lug B-5 (1 pce.)
*	0E00857A	BT Screw M3x6 Philips Binding Head (2 pcs.)
	0M03782A	Fuse Label 1A 250V (U.S.A., Canada, Japan & Others) (1 pce.)
	0M04096C	Fuse Label T500mA (UK, Australia & 220V Class 2) (1 pce.)
	0M04191A	Fuse Label T1A 250V (UK, Australia & 220V Class 2) (2 pcs.)
Q401,410	0B06255A	Transistor 2SD880 (Y)
Q404	0B06256A	Transistor 2SB834 (Y, GR)
	0B08601A	Transistor Mica TO-220 (3 pcs.)
	0B08602A	Transistor Bushing TO-220 (3 pcs.)
	0E00507A	Nut Hex. M3 (3 pcs.)
	0E00608A	Screw M3x10 Philips Pan Head (3A) (3 pcs.)
	0J04526A	Heat Sink (1 pce.)
	*: Depends on the versions.	

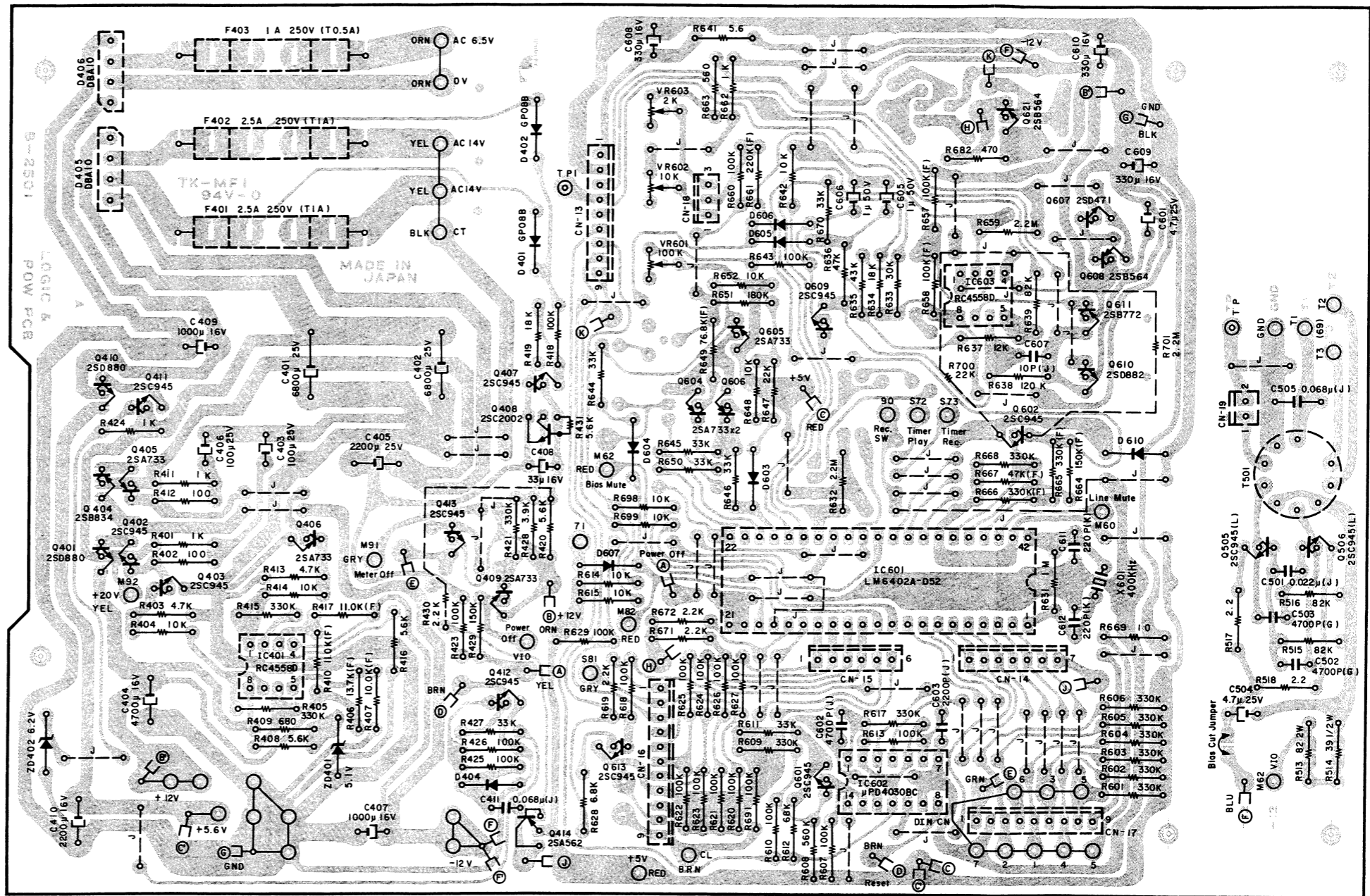


Fig. 7.11.2 Serial Nos.: A12301001 – A12302900

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.

7.11. Main P.C.B. Ass'y

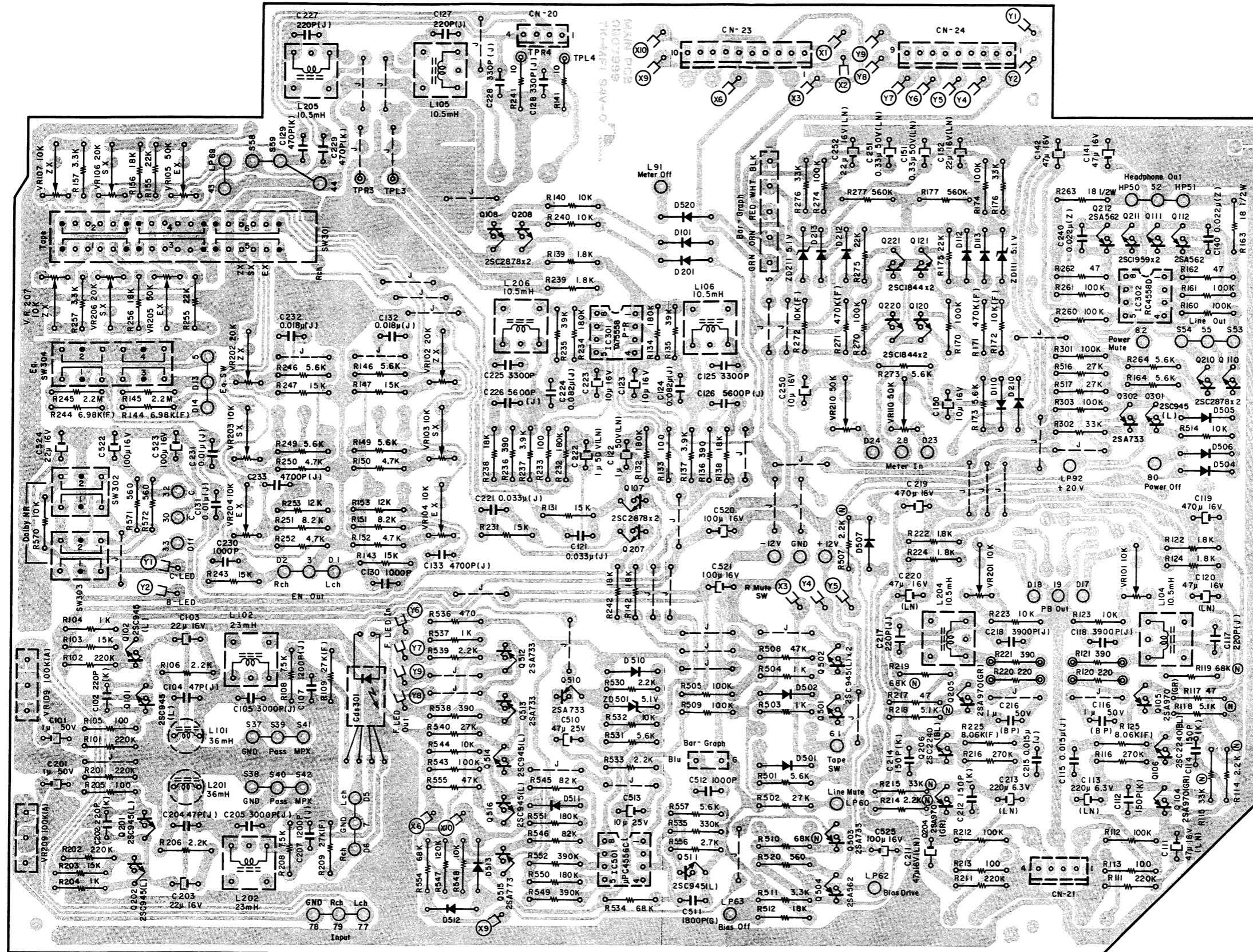


Fig. 7.12.1 Serial No.: A12305404 -

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.



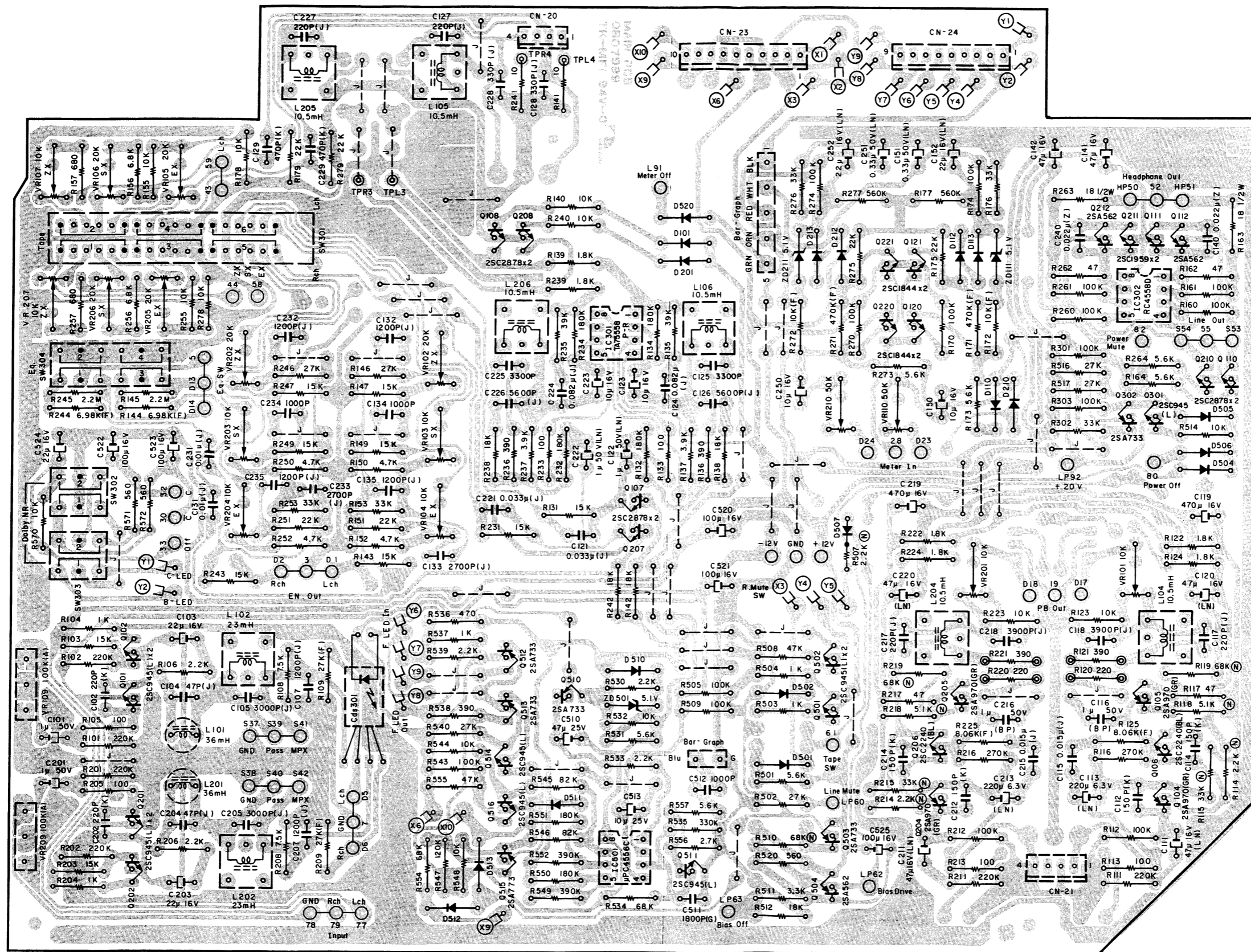


Fig. 7.12.2 Serial Nos.: A12302901 – A12305403

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
	BA04560A	Main P.C.B. Ass'y Serial Nos.: A12302901 - A12305403	R140,155	OB01888A	Carbon Resistor 10K ERD-25T J			-- Headphone Amp. --	R517	OB05743A	Carbon Resistor 27K ERD-25T J
			178,240			IC302	OB06124B	IC RC4558D	R503,504	OB01857A	Carbon Resistor 1K ERD-25T J
			255,278			Q110,210	OB06299A	Transistor 2SC2878	R505,509	OB01889A	Carbon Resistor 100K ERD-25T J
	-- PB Eq. Amp. --		R141,241	OB05936A	Carbon Resistor 10 ERD-25T J	Q111,211	OB06179A	Transistor 2SC1959 (Y)	R507	OB09309A	Carbon Resistor 2.2K ERD-25TS J (Noiseless)
Q104,105	OB06180A	Transistor 2SA970 (GR)	R156,256	OB01682A	Carbon Resistor 6.8K ERD-25T J	Q112,212	OB06202A	Transistor 2SA562 (Y)	R508	OB05641A	Carbon Resistor 47K ERD-25T J
Q106,206	OB06142A	Transistor 2SC2240 (BL)	R157,257	OB05794A	Carbon Resistor 680 ERD-25T J	Q301	OB01872A	Transistor 2SC945 (L)	R510	OB09311A	Carbon Resistor 68K ERD-25TS J (Noiseless)
L104,204	OB00068A	Trap Coil 10.5mH	R179,279	OB05615A	Carbon Resistor 22K ERD-25T J	Q302	OB06013A	Transistor 2SA733	R511	OB01681A	Carbon Resistor 3.3K ERD-25T J
VR101,201	OB07236A	Semi-fixed Volume 10K	C121,221	OB05583A	Mylar Capacitor 0.033µ 50V J	R160,161	OB01889A	Carbon Resistor 100K ERD-25T J	R512	OB05560A	Carbon Resistor 18K ERD-25T J
R111,211	OB05625A	Carbon Resistor 220K ERD-25T J	C122,222	OB09223A	Electrolytic Capacitor 1µ 50V (LN)	260,261			R514	OB01888A	Carbon Resistor 10K ERD-25T J
R112,212	OB01889A	Carbon Resistor 100K ERD-25T J	C123,223	OB01412A	Electrolytic Capacitor 10µ 16V	301,303			R520	OB05575A	Carbon Resistor 560 ERD-25T J
R113,213	OB01679A	Carbon Resistor 100 ERD-25T J	C124,224	OB05685A	Mylar Capacitor 0.082µ 50V J	R162,262	OB01706A	Carbon Resistor 47 ERD-25T J	C520,521	OB01400A	Electrolytic Capacitor 100µ 16V
R114,214	OB09309A	Carbon Resistor 2.2K ERD-25TS J (Noiseless)	C125,225	OB09166A	Mylar Capacitor 3300P 50V	R163,263	OB09536A	Fail Safe Type Resistor 18 RSF-1/2B J	525		
R115,215	OB09310A	Carbon Resistor 33K ERD-25TS J (Noiseless)	C126,226	OB05659A	Mylar Capacitor 5600P 50V J	R164,264	OB01887A	Carbon Resistor 5.6K ERD-25T J		-- Fader --	
R116,216	OB05620A	Carbon Resistor 270K ERD-25T J	C127,227	OB09247A	Mica Capacitor 220P 50V J	R302	OB05509A	Carbon Resistor 33K ERD-25T J	IC501	OB06216A	IC µPC4556C
R117,217	OB01706A	Carbon Resistor 47 ERD-25T J	C128,228	OB09322A	PP Capacitor 330P 100V J	C140,240	OB09291A	Ceramic Capacitor 0.022µ 50V Z	Q510,512	OB06013A	Transistor 2SA733
R118,218	OB09388A	Carbon Resistor 5.1K ERD-25TS J (Noiseless)	C129,229	OB09286A	Ceramic Capacitor 470P 50V K	C141,142	OB01403A	Electrolytic Capacitor 47µ 16V	513,515		
			SW301	OB07413A	Rotary Switch 4P-T Post				Q511,514	OB01872A	Transistor 2SC945 (L)
			CN20	OB08654A	4P-T Post				516		
				-- Rec. Level --		Q101,102	OB01872A	Transistor 2SC945 (L)	ZD501	OB06230A	Zener Diode 5.1V RD5.1EB2
R119,219	OB09311A	Carbon Resistor 68K ERD-25TS J (Noiseless)	VR102,202	OB07261A	Semi-fixed Volume 20K	L101,201	OB03919B	Inductor 36mH	D510,511	OB06181A	Silicon Diode 1SS53
R120,220	OB01933A	Carbon Resistor 220 ERD-25T J	VR103,104	OB07236A	Semi-fixed Volume 10K	L102,202	OB03563A	19kHz Coil 23mH	512,513		
R121,221	OB05691A	Carbon Resistor 390 ERD-25T J	203,204			VR109,209	OB07402A	Volume 100K (A)	R530,533	OB05622A	Carbon Resistor 2.2K ERD-25T J
R122,124	OB05614A	Carbon Resistor 1.8K ERD-25T J	R143,147	OB01683A	Carbon Resistor 15K ERD-25T J	R101,102	OB05625A	Carbon Resistor 220K ERD-25T J	539		
222,224			R144,244	OB09604A	Metal Film Resistor 6.98K SN14K2E F	R103,203	OB01683A	Carbon Resistor 15K ERD-25T J	R531,557	OB01887A	Carbon Resistor 5.6K ERD-25T J
R123,223	OB01888A	Carbon Resistor 10K ERD-25T J	R145,245	OB05671A	Carbon Resistor 2.2M ERD-25T J	R104,204	OB01857A	Carbon Resistor 1K ERD-25T J	R532,544	OB01888A	Carbon Resistor 10K ERD-25T J
R125,225	OB09431A	Metal Film Resistor 8.06K SN14K2E F	R146,246	OB05743A	Carbon Resistor 27K ERD-25T J	R105,205	OB01679A	Carbon Resistor 100 ERD-25T J	548		
C111,120	OB09218A	Electrolytic Capacitor 47µ 16V (LN)	R150,152	OB01846A	Carbon Resistor 4.7K ERD-25T J	R106,206	OB05622A	Carbon Resistor 2.2K ERD-25T J	R534,554	OB05692A	Carbon Resistor 68K ERD-25T J
C112,114	OB09281A	Ceramic Capacitor 150P 50V K	250,252			R108,208	OB09183A	Carbon Resistor 7.5K ERD-25T J	R535	OB05627A	Carbon Resistor 330K ERD-25T J
212,214			R151,251	OB05615A	Carbon Resistor 22K ERD-25T J	R109,209	OB09444A	Metal Film Resistor 27K SN14K2E F	R536	OB05576A	Carbon Resistor 470 ERD-25T J
C113,213	OB09151A	Electrolytic Capacitor 220µ 6.3V (LN)	R152,253	OB05509A	Carbon Resistor 33K ERD-25T J	C101,201	OB01405A	Electrolytic Capacitor 1µ 50V	R537	OB01857A	Carbon Resistor 1K ERD-25T J
C115,215	OB05557A	Mylar Capacitor 0.015µ 50V J	C131,231	OB05681A	Mylar Capacitor 0.01µ 50V J	C102,202	OB09283A	Ceramic Capacitor 220P 50V K	R538	OB05691A	Carbon Resistor 390 ERD-25T J
C116,216	OB09187A	Electrolytic Capacitor 1µ 50V (BP)	C132,135	OB05687A	Mylar Capacitor 1200P 50V J	C103,203	OB01862A	Electrolytic Capacitor 22µ 16V	R540	OB05743A	Carbon Resistor 27K ERD-25T J
C117,217	OB09247A	Mica Capacitor 220P 50V J	232,235			C104,204	OB09242A	Mica Capacitor 47P 50V J	R543	OB01889A	Carbon Resistor 100K ERD-25T J
C118,218	OB01804A	Mylar Capacitor 3900P 50V J	C133,233	OB09189A	Mylar Capacitor 2700P 50V J	C105,205	OB09262A	PP Capacitor 3000P 100V J	R545,546	OB05668A	Carbon Resistor 82K ERD-25T J
C119,219	OB01392A	Electrolytic Capacitor 470µ 16V	C134,234	OB00091A	Mylar Capacitor 1000P 50V	C107,207	OB05687A	Mylar Capacitor 1200P 50V J	R547	OB05621A	Carbon Resistor 120K ERD-25T J
CN21	OB08654A	4P-T Post	SW304	OB07400A	Push Switch	Cds301	OB06325A	Photocoupler MCD7214F	R549,552	OB05676A	Carbon Resistor 390K ERD-25T J
									R550,551	OB05640A	Carbon Resistor 180K ERD-25T J
									R555	OB05641A	Carbon Resistor 47K ERD-25T J
									R556	OB05629A	Carbon Resistor 2.7K ERD-25T J
IC301	OB06287A	IC TA75558P-R	Q120,121	OB06119A	Transistor 2SC1844 (P)	D520	OB01909A	Silicon Diode 1S1555	C510	OB01409A	Electrolytic Capacitor 47µ 25V
Q107,108	OB06299A	Transistor 2SC2878	220,221			R570	OB01888A	Carbon Resistor 10K ERD-25T J	C511	OB09409A	PP Capacitor 1800P 100V G
D101,201	OB06181A	Silicon Diode 1SS53	ZD111,211	OB06058A	Zener Diode 5.1V YZ051	R571,572	OB05575A	Carbon Resistor 560 ERD-25T J	C512	OB00091A	Mylar Capacitor 1000P 50V
L105,106	OB00068A	Trap Coil 10.5mH	D110,112	OB06181A	Silicon Diode 1SS53	C522,523	OB01400A	Electrolytic Capacitor 100µ 16V	C513	OB01674A	Electrolytic Capacitor 10µ 25V
205,206			113,210			C524	OB01862A	Electrolytic Capacitor 22µ 16V			
VR105,106	OB07261A	Semi-fixed Volume 20K	212,213			CN23	OB08954A	10P-S Post		-- Miscellaneous --	
205,206			VR110,210	OB07237A	Semi-fixed Volume 50K	CN24	OB08953A	9P-T Post	OB07999B	Main P.C.B.	
VR107,207	OB07236A	Semi-fixed Volume 10K	R170,174	OB01889A	Carbon Resistor 100K ERD-25T J				OM04226A	Label CN-20	(1 pce.)
R131,231	OB01683A	Carbon Resistor 15K ERD-25T J	270,274						OM04232A	Label CN-21	(1 pce.)
R132,134	OB05640A	Carbon Resistor 180K ERD-25T J	R171,271	OB09775A	Metal Film Resistor 470K SN14K2E F	Q501,502	OB01872A	Transistor 2SC945 (L)	OM04236A	Label CN-24	(1 pce.)
232,234			R172,272	OB09203A	Metal Film Resistor 10K SN14K2E F	Q503	OB06013A	Transistor 2SA733	OM04237A	Label CN-25	(1 pce.)
R133,233	OB01679A	Carbon Resistor 100 ERD-25T J	R173,273	OB01887A	Carbon Resistor 5.6K ERD-25T J	Q504	OB06202A	Transistor 2SA562 (Y)	OM04332A	Label CN-23	(1 pce.)
R135,235	OB01854A	Carbon Resistor 39K ERD-25T J	R175,275	OB05615A	Carbon Resistor 22K ERD-25T J	D501,502	OB06181A	Silicon Diode 1SS53	OJ04547A	Eq. Switch Shield	(1 pce.)
R136,236	OB05691A	Carbon Resistor 390 ERD-25T J	R176,276	OB09310A	Carbon Resistor 33K ERD-25T J	504,505					
R137,237	OB05675A	Carbon Resistor 3.9K ERD-25T J	R177,277	OB05784A	Carbon Resistor 560K ERD-25T J	506,507					
R138,142	OB05560A	Carbon Resistor 18K ERD-25T J	C150,250	OB01412A	Electrolytic Capacitor 10µ 16V	R501	OB01887A	Carbon Resistor 5.6K ERD-25T J			
238,242			C151,251	OB09327A	Electrolytic Capacitor 0.33µ 50V (LN)	R502,516	OB05743A	Carbon Resistor 27K ERD-25T J			
R139,239	OB05614A	Carbon Resistor 1.8K ERD-25T J	C152,252	OB09137A	Electrolytic Capacitor 22µ 16V (LN)						
			CN25	OB08932B	6P-H Connector 400mm						

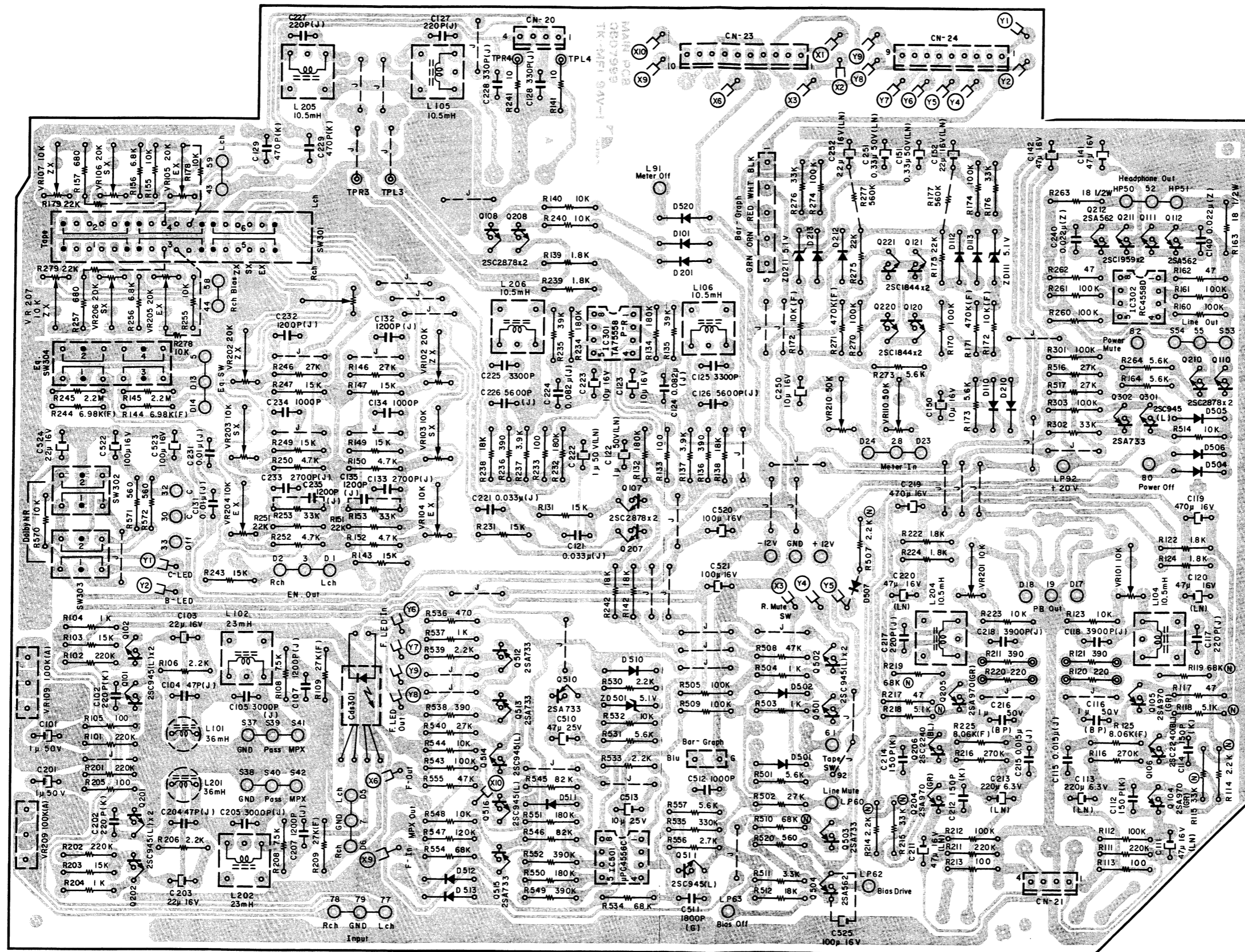


Fig. 7.12.3 Serial Nos.: A12301001 – A12302900

Note: Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	
	<b>BA04560A</b>	<b>Main P.C.B. Ass'y</b> Serial Nos.: A12301001 - A12302900	R140,155 178,240 255,278	OB01888A	Carbon Resistor 10K ERD-25T J			<b>-- Headphone Amp. --</b>	R517 R503,504 R505,509 R507	OB05743A OB01857A OB01889A OB09309A	Carbon Resistor 27K ERD-25T J Carbon Resistor 1K ERD-25T J Carbon Resistor 100K ERD-25T J Carbon Resistor 2.2K ERD-25TS J (Noiseless)	
	<b>-- PB Eq. Amp. --</b>		R141,241 R156,256 R157,257 R179,279	OB05936A OB01682A OB05794A OB05615A	Carbon Resistor 10 ERD-25T J Carbon Resistor 6.8K ERD-25T J Carbon Resistor 680 ERD-25T J Carbon Resistor 22K ERD-25T J	IC302 Q110,210 Q111,211 Q112,212 Q301 Q302	OB06124B OB06299A OB06179A OB06202A OB01872A OB06013A OB01889A	IC RC4558D Transistor 2SC2878 Transistor 2SC1959 (Y) Transistor 2SA562 (Y) Transistor 2SC945 (L) Transistor 2SA733 Carbon Resistor 100K ERD-25T J	R508 R510	OB05641A OB09311A	Carbon Resistor 47K ERD-25T J Carbon Resistor 68K ERD-25TS J (Noiseless)	
Q104,105 204,205	OB06180A	Transistor 2SA970 (GR)	C121,221 C122,222 C123,223 C124,224 C125,225 C126,226 C127,227 C128,228 C129,229 C129,229 CN20	OB05583A OB09223A OB01412A OB05685A OB09166A OB05659A OB09247A OB09322A OB09286A OB07413A OB08654A	Mylar Capacitor 0.033μ 50V J Electrolytic Capacitor 1μ 50V (LN) Electrolytic Capacitor 10μ 16V Mylar Capacitor 0.082μ 50V J Mylar Capacitor 3300P 50V Mylar Capacitor 5600P 50V J Mica Capacitor 220P 50V J PP Capacitor 330P 100V J Ceramic Capacitor 470P 50V K Rotary Switch 4P-T Post	R160,161 260,261 301,303 R162,262 R163,263 R164,264 R302 C140,240 C141,142	OB01706A OB09536A OB01887A OB05509A OB09291A OB01403A	Carbon Resistor 47 ERD-25T J Fail Safe Type Resistor 18 RSF-1/2B J Carbon Resistor 5.6K ERD-25T J Carbon Resistor 33K ERD-25T J Ceramic Capacitor 0.022μ 50V Z Electrolytic Capacitor 47μ 16V	R511 R512 R514 R520 C520,521 525	OB01681A OB05560A OB01888A OB05575A OB01400A	Carbon Resistor 3.3K ERD-25T J Carbon Resistor 18K ERD-25T J Carbon Resistor 10K ERD-25T J Carbon Resistor 560 ERD-25T J Electrolytic Capacitor 100μ 16V	
R111,211 R112,212 R113,213 R114,214	OB05625A OB01889A OB01679A OB09309A	Carbon Resistor 220K ERD-25T J Carbon Resistor 100K ERD-25T J Carbon Resistor 100 ERD-25T J Carbon Resistor 2.2K ERD-25TS J (Noiseless)	C129,229 CN20	OB09286A OB07413A OB08654A	Ceramic Capacitor 470P 50V K Rotary Switch 4P-T Post							
R115,215	OB09310A	Carbon Resistor 33K ERD-25TS J (Noiseless)										
R116,216 R117,217 R118,218	OB05620A OB01706A OB09388A	Carbon Resistor 270K ERD-25T J Carbon Resistor 47 ERD-25T J Carbon Resistor 5.1K ERD-25TS J (Noiseless)		<b>-- Rec. Level --</b>				<b>-- MPX --</b>			<b>-- Fader --</b>	
R119,219	OB09311A	Carbon Resistor 68K ERD-25TS J (Noiseless)	VR102,202 VR103,104 203,204	OB07261A OB07236A	Semi-fixed Volume 20K Semi-fixed Volume 10K	Q101,102 201,202 L101,201 L102,202 VR109,209 R101,102 201,202	OB01872A OB03919B OB03563A OB07402A OB05625A	Transistor 2SC945 (L) Inductor 36mH 19kHz Coil 23mH Volume 100K (A) Carbon Resistor 220K ERD-25T J	Q510,512 513,515 Q511,514 516 ZD501 D510,511 512,513 R530,533 539 R531,557 R532,544 548 R534,554 R535 R536 R537 R538 R540 R543 R545,546 R547 R549,552 R550,551 R555 R556 C510 C511 C512 C513	OB06216A OB06013A OB01872A OB06230A OB06181A OB05622A OB01887A OB01888A OB05692A OB05627A OB05576A OB01857A OB05691A OB05743A OB01889A OB05668A OB05621A OB05676A OB05640A OB05641A OB05629A OB01409A OB09409A OB00091A OB01674A	IC μPC4556C Transistor 2SA733 Transistor 2SC945 (L) Zener Diode 5.1V RD5.1EB2 Silicon Diode 1SS53 Carbon Resistor 2.2K ERD-25T J Carbon Resistor 5.6K ERD-25T J Carbon Resistor 10K ERD-25T J Carbon Resistor 68K ERD-25T J Carbon Resistor 330K ERD-25T J Carbon Resistor 470 ERD-25T J Carbon Resistor 1K ERD-25T J Carbon Resistor 390 ERD-25T J Carbon Resistor 27K ERD-25T J Carbon Resistor 100K ERD-25T J Carbon Resistor 82K ERD-25T J Carbon Resistor 120K ERD-25T J Carbon Resistor 390K ERD-25T J Carbon Resistor 180K ERD-25T J Carbon Resistor 47K ERD-25T J Carbon Resistor 2.7K ERD-25T J Electrolytic Capacitor 47μ 25V PP Capacitor 1800P 100V G Mylar Capacitor 1000P 50V Electrolytic Capacitor 10μ 25V	
R120,220 R121,221 R122,124 222,224 R123,223 R125,225 C111,120 211,220 C112,114 212,214 C113,213 C115,215 C116,216 C117,217 C118,218 C119,219 CN21	OB01933A OB05691A OB05614A OB01888A OB09431A OB09218A OB09281A OB09151A OB05557A OB09187A OB09247A OB01804A OB01392A OB08654A	Carbon Resistor 220 ERD-25T J Carbon Resistor 390 ERD-25T J Carbon Resistor 1.8K ERD-25T J Carbon Resistor 10K ERD-25T J Metal Film Resistor 8.06K SN14K2E F Electrolytic Capacitor 47μ 16V (LN) Ceramic Capacitor 150P 50V K Electrolytic Capacitor 220μ 6.3V (LN) Mylar Capacitor 0.015μ 50V J Electrolytic Capacitor 1μ 50V (BP) Mica Capacitor 220P 50V J Mylar Capacitor 3900P 50V J Electrolytic Capacitor 470μ 16V 4P-T Post	R143,147 149,243 247,249 R144,244 R145,245 R146,246 R150,152 250,252 R151,251 R153,253 C131,231 C132,135 232,235 C133,233 C134,234 SW304	OB01683A OB09604A OB05671A OB05743A OB01846A OB05615A OB05509A OB05681A OB05687A OB09189A OB00091A OB07400A	Carbon Resistor 15K ERD-25T J Metal Film Resistor 6.98K SN14K2E F Carbon Resistor 2.2M ERD-25T J Carbon Resistor 27K ERD-25T J Carbon Resistor 4.7K ERD-25T J Carbon Resistor 22K ERD-25T J Carbon Resistor 33K ERD-25T J Mylar Capacitor 0.01μ 50V J Mylar Capacitor 1200P 50V J Mylar Capacitor 2700P 50V J Mylar Capacitor 1000P 50V Push Switch			<b>-- Dolby NR SW --</b>			<b>-- Miscellaneous --</b>	
R133,233 R135,235 R136,236 R137,237 R138,142 238,242 R139,239	OB01679A OB01854A OB05691A OB05675A OB05560A OB05614A	Carbon Resistor 100 ERD-25T J Carbon Resistor 39K ERD-25T J Carbon Resistor 390 ERD-25T J Carbon Resistor 3.9K ERD-25T J Carbon Resistor 18K ERD-25T J Carbon Resistor 1.8K ERD-25T J	Q120,121 220,221 ZD111,211 D110,112 113,210 212,213 VR110,210 R170,174 270,274 R171,271 R172,272 R173,273 R175,275 R176,276 R177,277 C150,250 C151,251 C152,252 CN25	OB06119A OB06058A OB06181A OB07237A OB01889A OB09775A OB09203A OB01887A OB05615A OB09310A OB05784A OB01412A OB09327A OB09137A OB08932B	Transistor 2SC1844 (P) Zener Diode 5.1V YZ051 Silicon Diode 1SS53 Semi-fixed Volume 50K Carbon Resistor 100K ERD-25T J Metal Film Resistor 470K SN14K2E F Metal Film Resistor 10K SN14K2E F Carbon Resistor 5.6K ERD-25T J Carbon Resistor 22K ERD-25T J Carbon Resistor 33K ERD-25T J Carbon Resistor 560K ERD-25T J Electrolytic Capacitor 10μ 16V Electrolytic Capacitor 0.33μ 50V (LN) Electrolytic Capacitor 22μ 16V (LN) 6P-H Connector 400mm	D520 R570 R571,572 C522,523 C524 CN23 CN24 Q501,502 Q503 Q504 D501,502 504,505 506,507 R501 R502,516	OB01909A OB01888A OB05575A OB01400A OB01862A OB08954A OB08953A OB01872A OB06013A OB06202A OB06181A OB01887A OB05743A	Silicon Diode 1S1555 Carbon Resistor 10K ERD-25T J Carbon Resistor 560 ERD-25T J Electrolytic Capacitor 100μ 16V Electrolytic Capacitor 22μ 16V 10P-S Post 9P-T Post Transistor 2SC945 (L) Transistor 2SA733 Transistor 2SA562 (Y) Silicon Diode 1SS53 Carbon Resistor 5.6K ERD-25T J Carbon Resistor 27K ERD-25T J		OB07999A OM04226A OM04232A OM04236A OM04237A OM04332A OJ04547A	Main P.C.B. Label CN-20 (1 pce.) Label CN-21 (1 pce.) Label CN-24 (1 pce.) Label CN-25 (1 pce.) Label CN-23 (1 pce.) Eq. Switch Shield (1 pce.)	
IC301 Q107,108 207,208 D101,201 L105,106 205,206 VR105,106 205,206 VR107,207 R131,231 R132,134 232,234 R133,233 R135,235 R136,236 R137,237 R138,142 238,242 R139,239	OB06287A OB06299A OB06181A OB00068A OB07261A OB07236A OB01683A OB05640A OB01679A OB01854A OB05691A OB05675A OB05560A OB05614A	IC TA75558P-R Transistor 2SC2878 Silicon Diode 1SS53 Trap Coil 10.5mH Semi-fixed Volume 20K Semi-fixed Volume 10K Carbon Resistor 15K ERD-25T J Carbon Resistor 180K ERD-25T J Carbon Resistor 100 ERD-25T J Carbon Resistor 39K ERD-25T J Carbon Resistor 390 ERD-25T J Carbon Resistor 3.9K ERD-25T J Carbon Resistor 18K ERD-25T J Carbon Resistor 1.8K ERD-25T J	Q120,121 220,221 ZD111,211 D110,112 113,210 212,213 VR110,210 R170,174 270,274 R171,271 R172,272 R173,273 R175,275 R176,276 R177,277 C150,250 C151,251 C152,252 CN25	OB06119A OB06058A OB06181A OB07237A OB01889A OB09775A OB09203A OB01887A OB05615A OB09310A OB05784A OB01412A OB09327A OB09137A OB08932B	Transistor 2SC1844 (P) Zener Diode 5.1V YZ051 Silicon Diode 1SS53 Semi-fixed Volume 50K Carbon Resistor 100K ERD-25T J Metal Film Resistor 470K SN14K2E F Metal Film Resistor 10K SN14K2E F Carbon Resistor 5.6K ERD-25T J Carbon Resistor 22K ERD-25T J Carbon Resistor 33K ERD-25T J Carbon Resistor 560K ERD-25T J Electrolytic Capacitor 10μ 16V Electrolytic Capacitor 0.33μ 50V (LN) Electrolytic Capacitor 22μ 16V (LN) 6P-H Connector 400mm	D520 R570 R571,572 C522,523 C524 CN23 CN24 Q501,502 Q503 Q504 D501,502 504,505 506,507 R501 R502,516	OB01909A OB01888A OB05575A OB01400A OB01862A OB08954A OB08953A OB01872A OB06013A OB06202A OB06181A OB01887A OB05743A	Silicon Diode 1S1555 Carbon Resistor 10K ERD-25T J Carbon Resistor 560 ERD-25T J Electrolytic Capacitor 100μ 16V Electrolytic Capacitor 22μ 16V 10P-S Post 9P-T Post Transistor 2SC945 (L) Transistor 2SA733 Transistor 2SA562 (Y) Silicon Diode 1SS53 Carbon Resistor 5.6K ERD-25T J Carbon Resistor 27K ERD-25T J		OB07999A OM04226A OM04232A OM04236A OM04237A OM04332A OJ04547A	Main P.C.B. Label CN-20 (1 pce.) Label CN-21 (1 pce.) Label CN-24 (1 pce.) Label CN-25 (1 pce.) Label CN-23 (1 pce.) Eq. Switch Shield (1 pce.)	

## 8. MECHANISM ASS'Y AND PARTS LIST

### 8.1. Synthesis

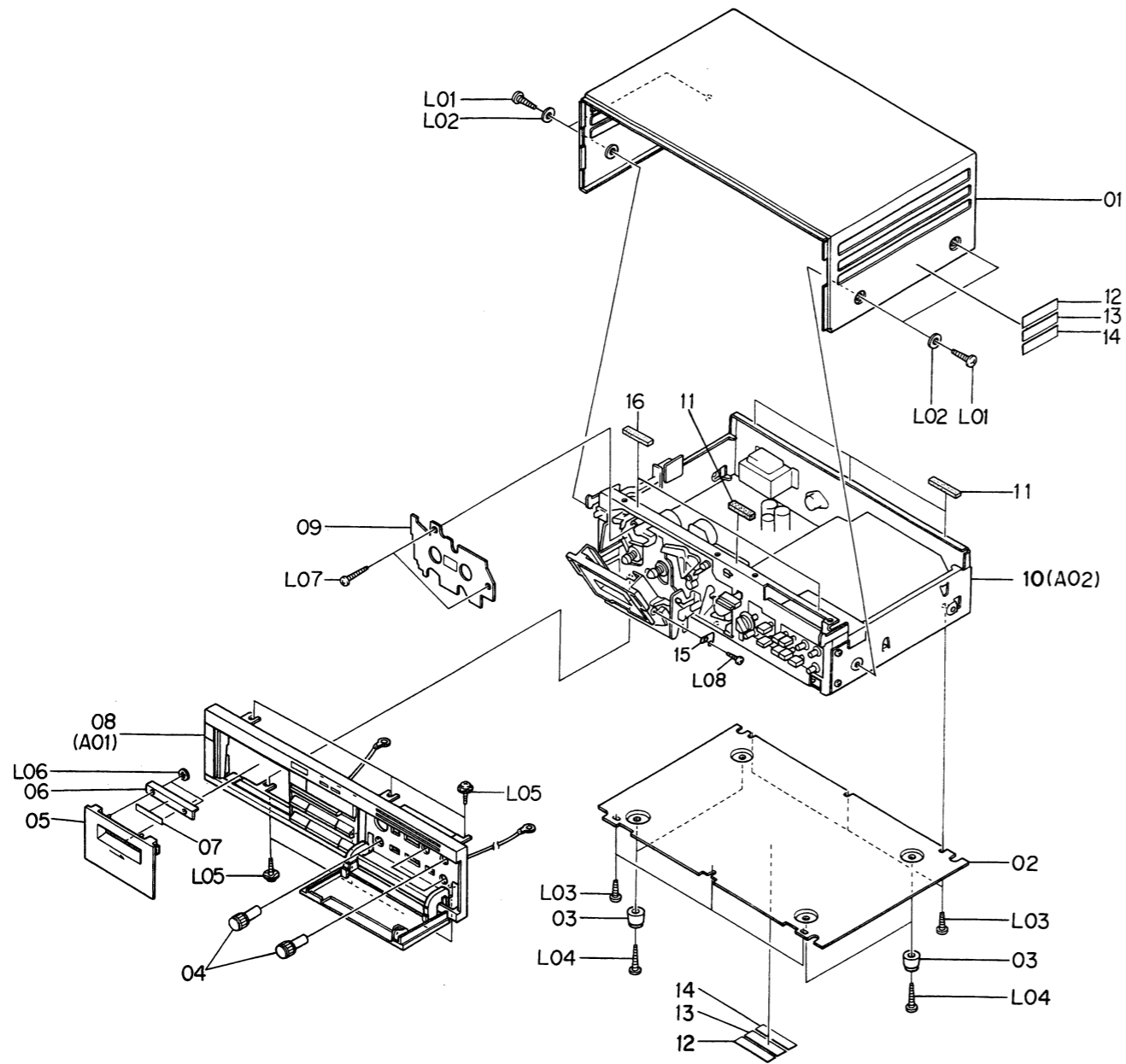


Fig. 8.1

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
	HA04237A	Synthesis (Japan)	1		HA04237A	Synthesis (Japan)	1
	HA04238A	Synthesis (U.S.A. & Canada)	1		HA04238A	Synthesis (U.S.A. & Canada)	1
	HA04239A	Synthesis (220V Class 2)	1		HA04239A	Synthesis (220V Class 2)	1
	HA04240A	Synthesis (UK)	1		HA04240A	Synthesis (UK)	1
	HA04241A	Synthesis (Australia)	1		HA04241A	Synthesis (Australia)	1
	HA04242A	Synthesis (Others)	1		HA04242A	Synthesis (Others)	1
		Serial No.: A12305404 -				Serial Nos.: A12301001 - A12305403	
01	0H04049C	Top Cover	1	01	0H04049B	Top Cover	1
02	0J04477A	Bottom Cover	1	02	0J04477A	Bottom Cover	1
03	0J03564A	Leg T-H	4	03	0J03564A	Leg T-H	4
04	0H03891A	Control Volume Knob	4	04	0H03891A	Control Volume Knob	4
05	0H04050D	Cassette Case	1	05	0H04050C	Cassette Case	1
06	0H04067A	Cassette Case Cover	1	06	0J04573A	Cassette Case Cover	1
07	0J04572A	Adhesive Tape	1	07	0J04572A	Adhesive Tape	1
08	HA04243A	Front Panel Ass'y	1	08	HA04243A	Front Panel Ass'y	1
09	HA04218A	Cover Plate Ass'y	1	09	HA04218A	Cover Plate Ass'y	1
10	JA03902C	Chassis Ass'y (Japan)	1	10	JA03902A	Chassis Ass'y (Japan)	1
	JA03903C	Chassis Ass'y (U.S.A. & Canada)	1		JA03903A	Chassis Ass'y (U.S.A. & Canada)	1
	JA03904C	Chassis Ass'y (220V Class 2)	1		JA03904A	Chassis Ass'y (220V Class 2)	1
	JA03905C	Chassis Ass'y (UK)	1		JA03905A	Chassis Ass'y (UK)	1
	JA03906C	Chassis Ass'y (Australia)	1		JA03906A	Chassis Ass'y (Australia)	1
	JA03907C	Chassis Ass'y (Others)	1		JA03907A	Chassis Ass'y (Others)	1
11	0J04550A	Top Cover Cushion	4	11	0J04550A	Top Cover Cushion	4
12	0M03883B	Lamp Caution Label (U.S.A. & Canada)	1	12	0M03883B	Lamp Caution Label (U.S.A. & Canada)	1
13	0M03800A	Caution Label H (U.S.A. & Canada)	1	13	0M03800A	Caution Label H (U.S.A. & Canada)	1
14	0M04314A	UL Caution Label (U.S.A. & Canada)	1	14	0M04314A	UL Caution Label (U.S.A. & Canada)	1
	0M04101B	Caution Label (Japan, 220V Class 2, UK, Australia & Others)	1		0M04101B	Caution Label (Japan, 220V Class 2, UK, Australia & Others)	1
15	0J04592B	Cassette Case Earth Spring	1	15	0J04592B	Cassette Case Earth Spring	1
16	0J04587A	Front Cushion	2	16	0J04587A	Front Cushion	2
L01	0E00915A	BT Screw M4x8 Philips Binding Head (Black Chromate)	4	L01	0E00915A	BT Screw M4x8 Philips Binding Head (Black Chromate)	4
L02	0E00736A	Washer 4mm (Black Chromate)	4	L02	0E00736A	Washer 4mm (Black Chromate)	4
L03	0E00857A	BT Screw M3x6 Philips Binding Head	6	L03	0E00857A	BT Screw M3x6 Philips Binding Head	6
L04	0E00865A	BT Screw M3x10 Philips Binding Head (Chromate)	4	L04	0E00865A	BT Screw M3x10 Philips Binding Head (Chromate)	4
L05	0E00943A	BT Screw M3x8 Philips Binding Head (Polywave)	6	L05	0E00943A	BT Screw M3x8 Philips Binding Head (Polywave)	6
L06	0E00967A	Stopper Ring 3mm CS	2	L06	0E00967A	Stopper Ring 3mm CS	2
L07	0E00950A	BT Screw M3x14 Philips Pan Head (Black Chromate)	2	L07	0E00950A	BT Screw M3x14 Philips Pan Head (Black Chromate)	2
L08	0E00840A	BT Screw M2x8 Philips Pan Head	1	L08	0E00840A	BT Screw M2x8 Philips Pan Head	1



Schematic Ref. No.	Part No.	Description	Q'ty
A01	HA04243A	Front Panel Ass'y Serial No.: A12305404 -	1
01	OH04033B	Power Switch Button	1
02	OJ04514C	Power Switch Button Spring	1
03	OH04035B	Eject Button	1
04	OJ04513A	Eject Button Spring	1
05	OH04037B	Reset Switch Button	1
06	OH04036B	Mute Switch Button	1
07	OH04032B	Button Escutcheon S	1
08	OJ04517A	Fader Shaft	1
09	OH04045C	Fader Button	1
10	OJ04511A	Fader Button Spring	2
11	OH04042E	Front Escutcheon	1
12	OH04041A	LED Lens	9
13	OH04034B	Control Button L	2
14	OH04038B	Control Button S	4
15	OJ04508C	Control Button Shaft	2
16	OJ04510A	Control Button Cushion	6
17	OH04057C	Front Door	1
18	JA03921A	Adjustment Lid Holder Ass'y	1
19	OH04048B	Door Arm R	1
20	OH04046B	Joint Plate	1
21	OH04047B	Door Arm L	1
22	OJ04551B	Door Arm Shaft L	1
23	OJ04509B	Door Arm Shaft R	1
24	OJ04516B	Door Spring	1
25	OH04039D	Front Panel	1
26	OJ04553A	Damper	1
27	JA03923A	Lock Lever Ass'y	1
28	OJ04560A	Door Cushion	1
29	OH04000A	Meter Cover	1
30	BA04591A	Indicator P.C.B. Ass'y	1
31	OJ04519A	Meter Shield Case	1
32	OJ04594A	Earth Sheet A	1
33	BA04592A	Control Switch P.C.B. Ass'y	1
34	OJ04557B	Fader Rubber S	2
35	OJ04568A	Control Switch Spacer	4
36	BA04593A	LED P.C.B. Ass'y	1
37	OJ04512A	Reset Spring	1
38	OH04031A	Fader Lens	2
39	BA04590A	Counter-2 P.C.B. Ass'y	1
40	BA04589A	Counter-1 P.C.B. Ass'y	1
41	OJ04518B	Counter Shield Case	1
42	OJ04558A	Fader Rubber L	1
43	OJ04593B	Fader Earth Spring	1
L01	OE00857A	BT Screw M3x6 Philips Binding Head	18
L02	OE00868A	BT Screw M3x8 Philips Binding Head	6
L03	OE00637A	Washer 3.3mm	3
L04	OE00252A	Stopper Ring CS 3mm	3
L05	OE03014A	Stopper Ring 4mm	3
L06	OE00920A	Screw M3x6 Philips Pan Head (Polywave)	2
L07	OE00181A	E-Ring 3mm	3
L08	OE00965A	BT Screw M3x6 Philips Binding Head (Nickel)	1
L09	OE00593A	Screw M3x6 Philips Binding Head (Bronze)	2
L10	OJ04310A	Washer FT40	1
L11	OJ04354A	Washer FT30	3

### 8.2. Front Panel Ass'y (A01)

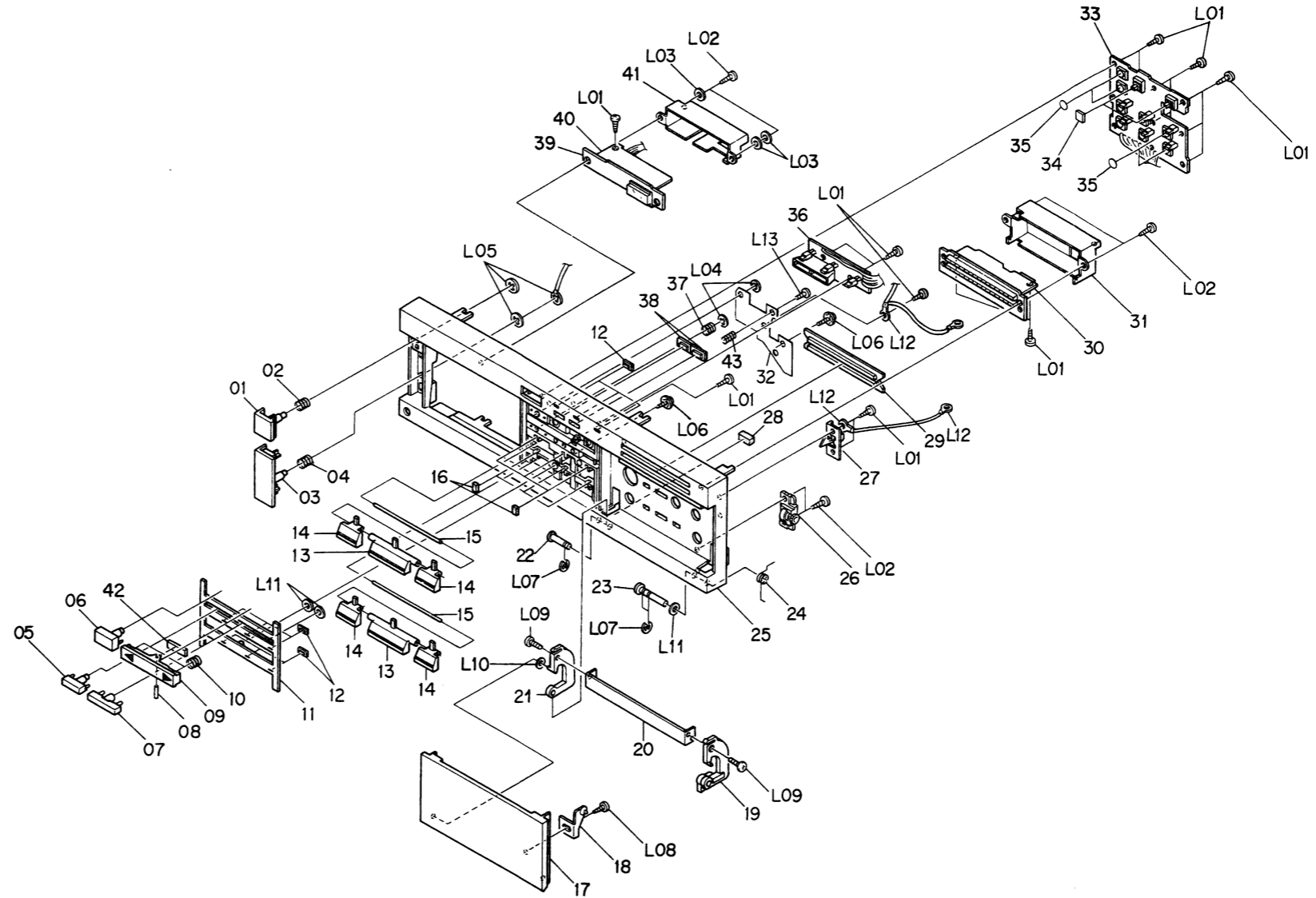


Fig. 8.2.1 Serial No.: A12305404 -

Schematic Ref. No.	Part No.	Description	Q'ty
L12	OE00037A	Earth Lug B-5	4
L13	OE03013A	BT Screw M3x5 Philips Binding Head	1

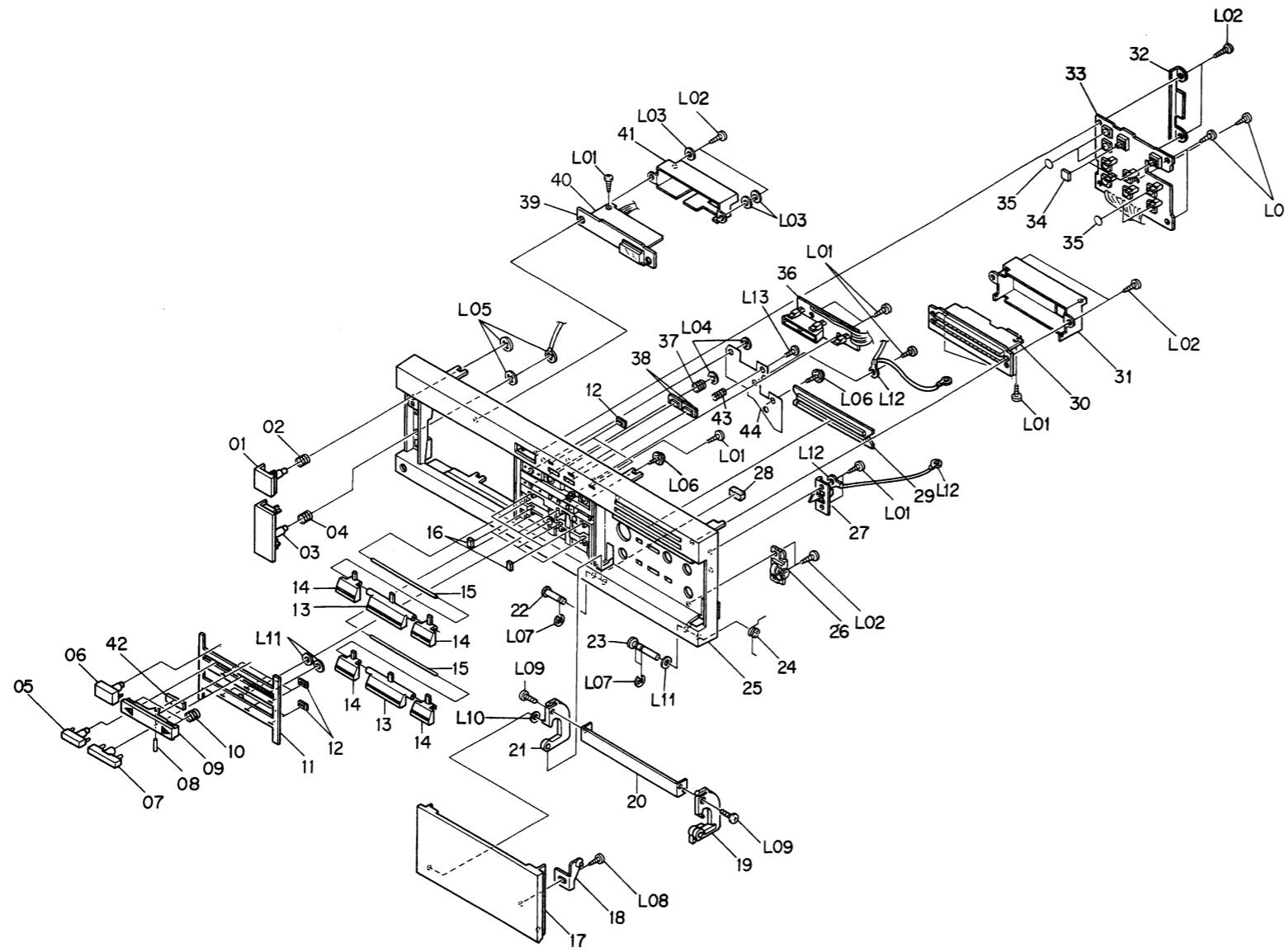


Fig. 8.2.2 Serial Nos.: A12301001 – A12305403

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
<b>A01</b>	<b>HA04243A</b>	<b>Front Panel Ass'y</b> Serial Nos.: A12301001 – A12305403	<b>1</b>	14	0H04038B	Control Button S	4
01	0H04033B	Power Switch Button	1	15	0J04508C	Control Button Shaft	2
02	0J04514C	Power Switch Button Spring	1	16	0J04510A	Control Button Cushion	6
03	0H04035B	Eject Button	1	17	0H04057C	Front Door	1
04	0J04513A	Eject Button Spring	1	18	JA03921A	Adjustment Lid Holder Ass'y	1
05	0H04037B	Reset Switch Button	1	19	0H04048B	Door Arm R	1
06	0H04036B	Mute Switch Button	1	20	0H04046B	Joint Plate	1
07	0H04032B	Button Escutcheon S	1	21	0H04047B	Door Arm L	1
08	0J04517A	Fader Shaft	1	22	0J04551B	Door Arm Shaft L	1
09	0H04045C	Fader Button	1	23	0J04509B	Door Arm Shaft R	1
10	0J04511A	Fader Button Spring	2	24	0J04516B	Door Spring	1
11	0H04042D	Front Escutcheon	1	25	0H04039D	Front Panel	1
12	0H04041A	LED Lens	9	26	0J04553A	Damper	1
13	0H04034B	Control Button L	2	27	JA03923A	Lock Lever Ass'y	1
				28	0J04560A	Door Cushion	1
				29	0H04000A	Meter Cover	1
				30	BA04591A	Indicator P.C.B. Ass'y	1

Schematic Ref. No.	Part No.	Description	Q'ty
31	0J04519A	Meter Shield Case	1
32	0J04574A	Control Switch P.C.B. Holder	1
33	BA04592A	Control Switch P.C.B. Ass'y	1
34	0J04557A	Fader Rubber S	2
35	0J04568A	Control Switch Spacer	4
36	BA04593A	LED P.C.B. Ass'y	1
37	0J04512A	Reset Spring	1
38	0H04031A	Fader Lens	2
39	BA04590A	Counter-2 P.C.B. Ass'y	1
40	BA04589A	Counter-1 P.C.B. Ass'y	1
41	0J04518A	Counter Shield Case	1
42	0J04558A	Fader Rubber L	1
43	0J04593B	Fader Earth Spring	1
44	0J04594A	Earth Sheet A	1
L01	0E00857A	BT Screw M3x6 Philips Binding Head	11
L02	0E00868A	BT Screw M3x8 Philips Binding Head	8
L03	0E00637A	Washer 3.3mm	3
L04	0E00252A	Stopper Ring CS 3mm	3
L05	0E00926A	Stopper Ring 4mm	3
L06	0E00920A	Screw M3x6 Philips Pan Head (Polywave)	2
L07	0E00181A	E-Ring 3mm	3
L08	0E00965A	BT Screw M3x6 Philips Binding Head (Nickel)	1
L09	0E00593A	Screw M3x6 Philips Binding Head (Bronze)	2
L10	0J04310A	Washer FT40	1
L11	0J04354A	Washer FT30	3
L12	0E00037A	Earth Lug B-5	4
L13	0E03013A	BT Screw M3x5 Philips Binding Head	1
<b>A02</b>	<b>JA03902C</b>	<b>Chassis Ass'y (Japan)</b>	<b>1</b>
	<b>JA03903C</b>	<b>Chassis Ass'y (U.S.A. &amp; Canada)</b>	<b>1</b>
	<b>JA03904C</b>	<b>Chassis Ass'y (220V Class 2)</b>	<b>1</b>
	<b>JA03905C</b>	<b>Chassis Ass'y (UK)</b>	<b>1</b>
	<b>JA03906C</b>	<b>Chassis Ass'y (Australia)</b>	<b>1</b>
	<b>JA03907C</b>	<b>Chassis Ass'y (Others)</b>	<b>1</b>
		Serial No.: A12305404 –	
01	JA03911A	Headphone Holder Ass'y	1
02	0H04053B	Monitor Switch Button	1
03	0J04523B	Monitor Switch Base	1
04	0J04527A	Mechanism Bracket	1
05	0J04522D	Front Chassis	1
06	BA04631A	Monitor Switch P.C.B. Ass'y	1
07	0B02228B	Cassette Case Lamp	1
08	0J04506C	Lamp Holder	1
09	0J04469A	Cassette Case Plate	1
10	0B02542A	Cassette Case Lamp P.C.B.	1
11	CA08378A	Mechanism Ass'y LX-5	1
12	0J04535A	Arm Holder	1
13	0J04524B	Power Switch Bar	1
14	BA04626A	Power Switch P.C.B. Ass'y (Japan)	1
	BA04627A	Power Switch P.C.B. Ass'y (U.S.A. & Canada)	1
	BA04628A	Power Switch P.C.B. Ass'y (UK, 220V Class 2, Australia & Others)	1

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
15	0H03890B	Control Volume Knob	1	08	0J04506C	Lamp Holder	1
16	0H04054B	Push Button	7	09	0J04469A	Cassette Case Plate	1
17	0J04525A	Switch Holder	1	10	0B02542A	Cassette Case Lamp P.C.B.	1
18	BA04753A	Main P.C.B. Ass'y	1	11	CA08327A	Mechanism Ass'y LX-5	1
19	BA04731A	Amp. Switch P.C.B. Ass'y	1	12	0J04535A	Arm Holder	1
20	0J04565A	Monitor Switch Shield	1	13	0J04524A	Power Switch Bar	1
21	0J04520A	Side Chassis L	1	14	BA04626A	Power Switch P.C.B. Ass'y (Japan)	1
22	0J04521D	Center Chassis	1		BA04627A	Power Switch P.C.B. Ass'y (U.S.A. & Canada)	1
23	0J04471A	Side Chassis R	1		BA04628A	Power Switch P.C.B. Ass'y (UK, 220V Class 2, Australia & Others)	1
24	0J04548B	Amp. Shield Plate	1				
25	BA04645A	Dolby NR P.C.B. Ass'y (Japan, 220V Class 2, UK, Australia & Others)	1	15	0H03890B	Control Volume Knob	1
	BA04574A	Dolby NR P.C.B. Ass'y (U.S.A. & Canada)	1	16	0H04054B	Push Button	7
26	0B08771A	Hinge P.C.B.	2	17	0J04525A	Switch Holder	1
27	BA04641A	Logic & Power P.C.B. Ass'y (U.S.A., Canada & Others)	1	18	BA04560A	Main P.C.B. Ass'y	1
	BA04581A	Logic & Power P.C.B. Ass'y (UK, 220V Class 2 & Australia)	1	19	BA04587A	Amp. Switch P.C.B. Ass'y	1
	BA04582A	Logic & Power P.C.B. Ass'y (Japan)	1	20	0J04565A	Monitor Switch Shield	1
28	HA04246A	Rear Panel Ass'y (Japan)	1	21	0J04520A	Side Chassis L	1
	HA04247A	Rear Panel Ass'y (U.S.A. & Canada)	1	22	0J04521B	Center Chassis	1
	HA04248A	Rear Panel Ass'y (220V Class 2)	1	23	0J04471A	Side Chassis R	1
	HA04249A	Rear Panel Ass'y (UK)	1	24	0J04548B	Amp. Shield Plate	1
	HA04250A	Rear Panel Ass'y (Australia)	1	25	BA04645A	Dolby NR P.C.B. Ass'y (Japan, 220V Class 2, UK, Australia & Others)	1
	HA04251A	Rear Panel Ass'y (Others)	1		BA04574A	Dolby NR P.C.B. Ass'y (U.S.A. & Canada)	1
29	0B08515A	Insu-Lock	30	26	0B08771A	Hinge P.C.B.	2
30	0J04583A	Front Seal	3	27	BA04641A	Logic & Power P.C.B. Ass'y (U.S.A., Canada & Others)	1
31	0J04595A	Earth Sheet B	1		BA04581A	Logic & Power P.C.B. Ass'y (UK, 220V Class 2 & Australia)	1
32	0J04418A	Free Bushing 70mm	1		BA04582A	Logic & Power P.C.B. Ass'y (Japan)	1
L01	0E00857A	BT Screw M3x6 Philips Binding Head	36	28	HA04246A	Rear Panel Ass'y (Japan)	1
L02	0E00944A	BT Screw M4x15 Philips Binding Head (Black Chromate)	3		HA04247A	Rear Panel Ass'y (U.S.A. & Canada)	1
L03	0E00924A	BT Screw M4x16 Philips Binding Head	1		HA04248A	Rear Panel Ass'y (220V Class 2)	1
L04	0E00078A	Washer 4mm	4		HA04249A	Rear Panel Ass'y (UK)	1
L05	0E00962A	BT Screw M2x6 Philips Binding Head (Black Chromate)	1		HA04250A	Rear Panel Ass'y (Australia)	1
L06	0E00860A	BT Screw M3x6 Philips Binding Head (Black Chromate)	2		HA04251A	Rear Panel Ass'y (Others)	1
L07	0E00157A	Washer 3mm	3	29	0B08515A	Insu-Lock	30
L08	0E00612A	Screw M3x6 Philips Pan Head (2A)	8	30	0J04583A	Front Seal	3
L09	-	Volume Nut	(2)	31	0J04595A	Earth Sheet B	1
L10	-	Volume Washer	(2)	32	0J04418A	Free Bushing 70mm	1
A02	JA03902A	Chassis Ass'y (Japan)	1	L01	0E00857A	BT Screw M3x6 Philips Binding Head	36
	JA03903A	Chassis Ass'y (U.S.A. & Canada)	1	L02	0E00944A	BT Screw M4x15 Philips Binding Head (Black Chromate)	3
	JA03904A	Chassis Ass'y (220V Class 2)	1	L03	0E00924A	BT Screw M4x16 Philips Binding Head	1
	JA03905A	Chassis Ass'y (UK)	1	L04	0E00078A	Washer 4mm	4
	JA03906A	Chassis Ass'y (Australia)	1	L05	0E00962A	BT Screw M2x6 Philips Binding Head (Black Chromate)	1
	JA03907A	Chassis Ass'y (Others)	1	L06	0E00860A	BT Screw M3x6 Philips Binding Head (Black Chromate)	2
		Serial Nos.: A12301001 - A12305403		L07	0E00157A	Washer 3mm	3
01	JA03911A	Headphone Holder Ass'y	1	L08	0E00612A	Screw M3x6 Philips Pan Head (2A)	8
02	0H04053B	Monitor Switch Button	1	L09	-	Volume Nut	(2)
03	0J04523B	Monitor Switch Base	1	L10	-	Volume Washer	(2)
04	0J04527A	Mechanism Bracket	1				
05	0J04522C	Front Chassis	1				
06	BA04631A	Monitor Switch P.C.B. Ass'y	1				
07	0B02228B	Cassette Case Lamp	1				

### 8.3. Chassis Ass'y (A02)

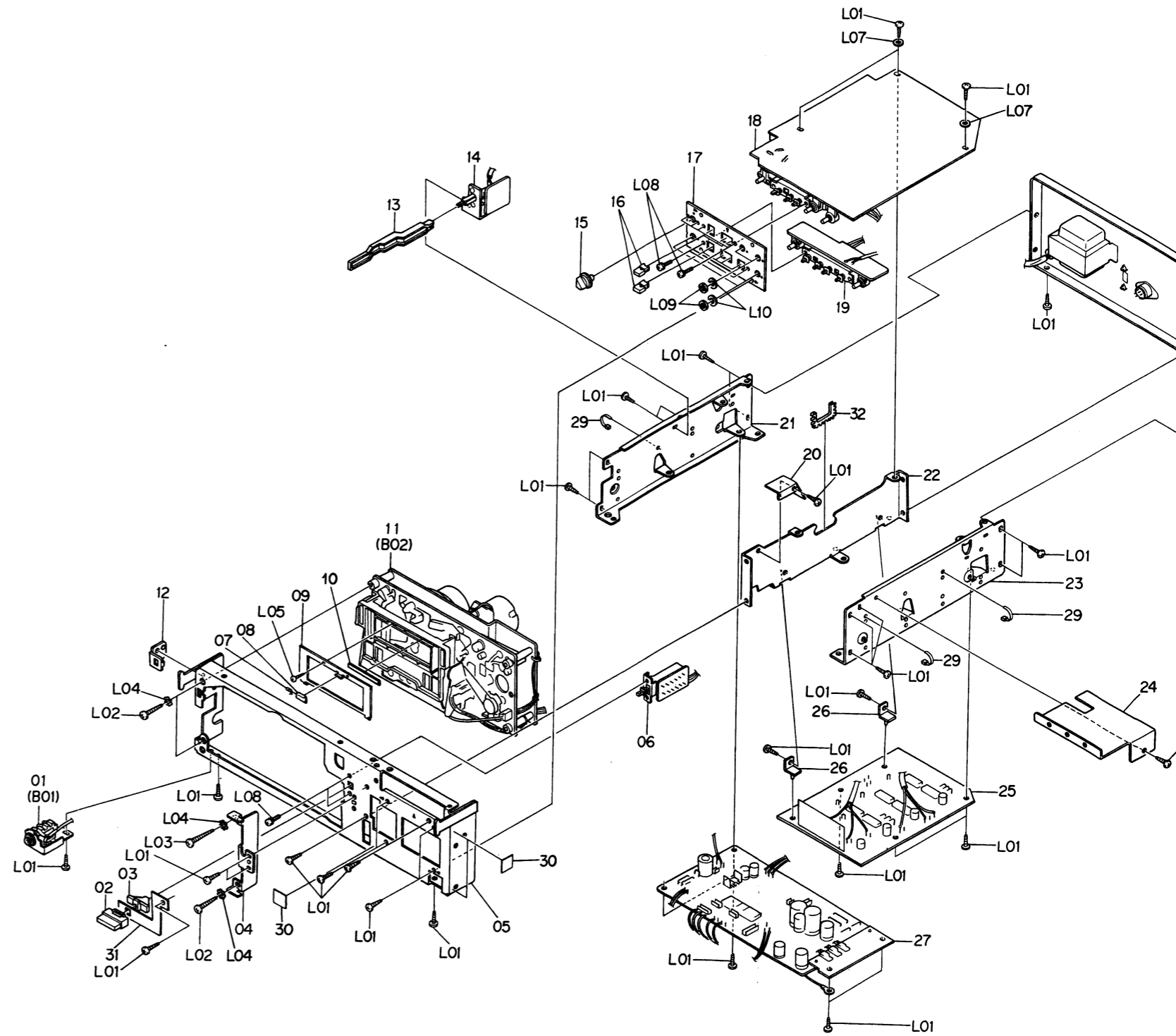


Fig. 8.3

Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
Volume Knob	1	08	0J04506C	Lamp Holder	1
Button	7	09	0J04469A	Cassette Case Plate	1
Holder	1	10	0B02542A	Cassette Case Lamp P.C.B.	1
P.C.B. Ass'y	1	11	CA08327A	Mechanism Ass'y LX-5	1
Switch P.C.B. Ass'y	1	12	0J04535A	Arm Holder	1
or Switch Shield	1	13	0J04524A	Power Switch Bar	1
chassis L	1	14	BA04626A	Power Switch P.C.B. Ass'y (Japan)	1
Chassis	1				
chassis R	1		BA04627A	Power Switch P.C.B. Ass'y (U.S.A. & Canada)	1
Shield Plate	1				
NR P.C.B. Ass'y (Japan, IV Class 2, UK, Australia & Others)	1		BA04628A	Power Switch P.C.B. Ass'y (UK, 220V Class 2, Australia & Others)	1
NR P.C.B. Ass'y (U.S.A. & Canada)	1	15	0H03890B	Control Volume Knob	1
P.C.B.	2	16	0H04054B	Push Button	7
Power P.C.B. Ass'y (U.S.A., Canada & Others)	1	17	0J04525A	Switch Holder	1
Power P.C.B. Ass'y (Japan)	1	18	BA04560A	Main P.C.B. Ass'y	1
Power P.C.B. Ass'y (220V Class 2 & Australia)	1	19	BA04587A	Amp. Switch P.C.B. Ass'y	1
Power P.C.B. Ass'y (Japan)	1	20	0J04565A	Monitor Switch Shield	1
Panel Ass'y (Japan)	1	21	0J04520A	Side Chassis L	1
Panel Ass'y (U.S.A. & Canada)	1	22	0J04521B	Center Chassis	1
Panel Ass'y (220V Class 2)	1	23	0J04471A	Side Chassis R	1
Panel Ass'y (UK)	1	24	0J04548B	Amp. Shield Plate	1
Panel Ass'y (Australia)	1	25	BA04645A	Dolby NR P.C.B. Ass'y (Japan, 220V Class 2, UK, Australia & Others)	1
Panel Ass'y (Others)	1		BA04574A	Dolby NR P.C.B. Ass'y (U.S.A. & Canada)	1
Seal	30	26	0B08771A	Hinge P.C.B.	2
Sheet B	1	27	BA04641A	Logic & Power P.C.B. Ass'y (U.S.A., Canada & Others)	1
Shipping 70mm	1				
Screw M3x6 Philips Binding Head	36		BA04581A	Logic & Power P.C.B. Ass'y (UK, 220V Class 2 & Australia)	1
Screw M4x15 Philips Binding Head (Black Chromate)	3		BA04582A	Logic & Power P.C.B. Ass'y (Japan)	1
Screw M4x16 Philips Binding Head	1	28	HA04246A	Rear Panel Ass'y (Japan)	1
4mm	4		HA04247A	Rear Panel Ass'y (U.S.A. & Canada)	1
Screw M2x6 Philips Binding Head (Black Chromate)	1		HA04248A	Rear Panel Ass'y (220V Class 2)	1
Screw M3x6 Philips Binding Head (Black Chromate)	2		HA04249A	Rear Panel Ass'y (UK)	1
3mm	3		HA04250A	Rear Panel Ass'y (Australia)	1
13x6 Philips Pan Head (2A) Nut	8		HA04251A	Rear Panel Ass'y (Others)	1
Washer	(2)				
			0B08515A	Insu-Lock	30
			0J04583A	Front Seal	3
			0J04595A	Earth Sheet B	1
			0J04418A	Free Bushing 70mm	1
		L01	0E00857A	BT Screw M3x6 Philips Binding Head	36
		L02	0E00944A	BT Screw M4x15 Philips Binding Head (Black Chromate)	3
		L03	0E00924A	BT Screw M4x16 Philips Binding Head	1
		L04	0E00078A	Washer 4mm	4
		L05	0E00962A	BT Screw M2x6 Philips Binding Head (Black Chromate)	1
		L06	0E00860A	BT Screw M3x6 Philips Binding Head (Black Chromate)	2
		L07	0E00157A	Washer 3mm	3
		L08	0E00612A	Screw M3x6 Philips Pan Head (2A)	8
		L09	-	Volume Nut	(2)
		L10	-	Volume Washer	(2)
One Holder Ass'y	1				
Switch Button	1				
Switch Base	1				
Mechanism Bracket	1				
Chassis	1				
Switch P.C.B. Ass'y	1				
Case Lamp	1				

### 8.3. Chassis Ass'y (A02)

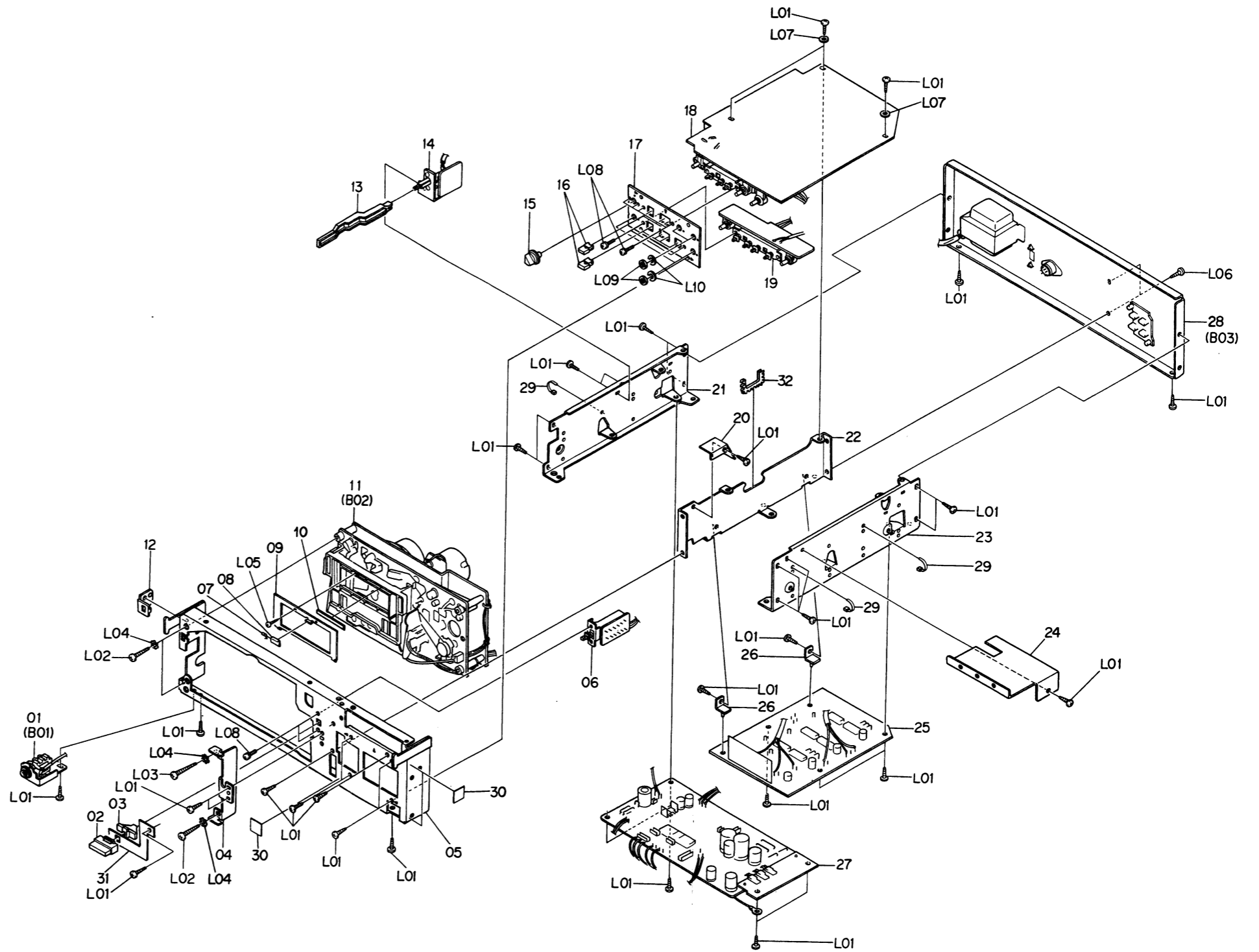


Fig. 8.3

8.4. Headphone Holder Ass'y (B01)

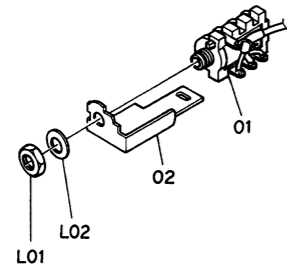


Fig. 8.4

8.5. Mechanism Ass'y LX-5 (B02)

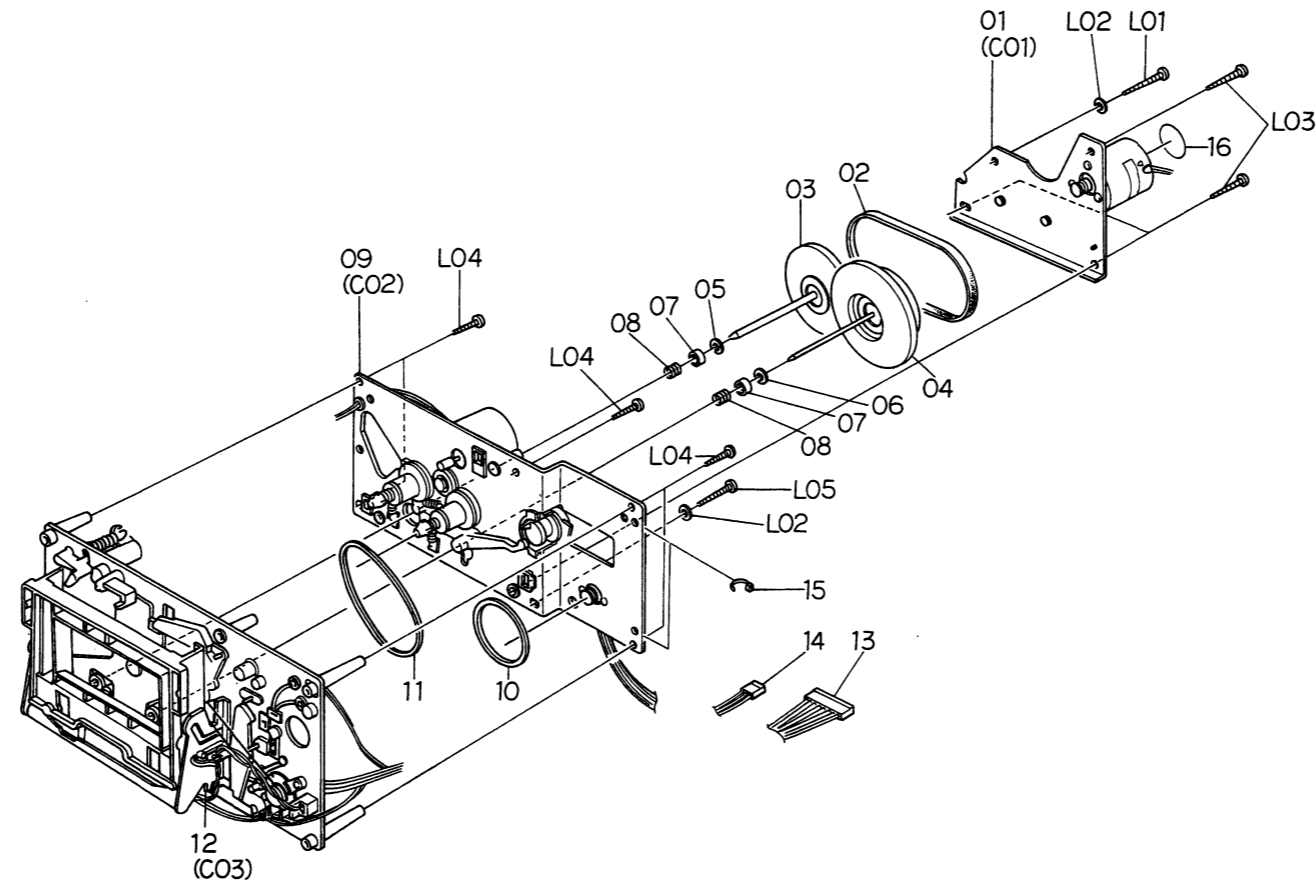


Fig. 8.5

8.6. Rear Panel Ass'y (B03)

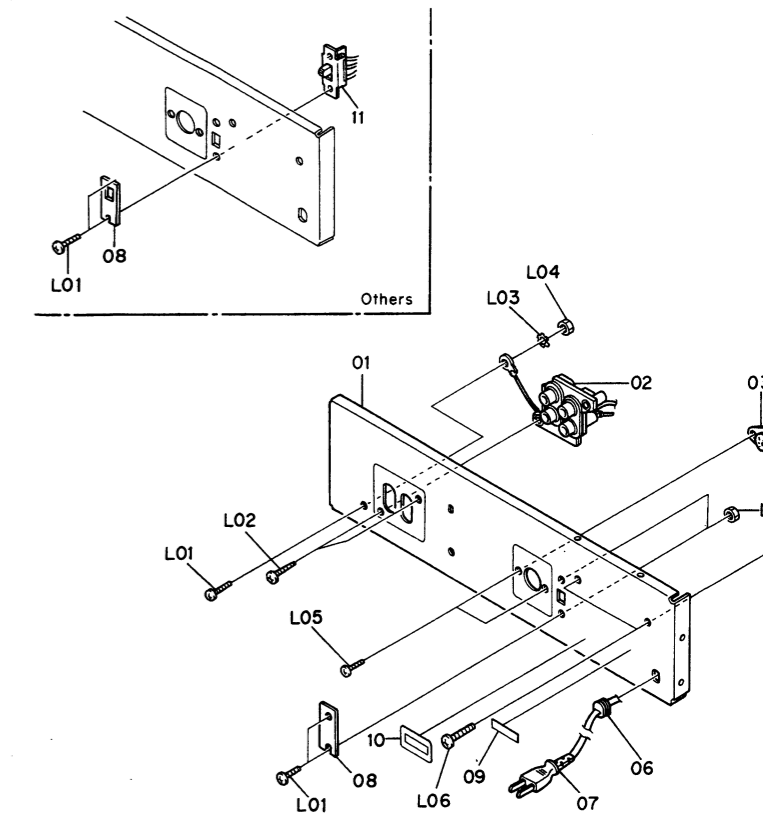


Fig. 8.6

Schematic Ref. No.	Part No.	Description	Q'ty
<b>B01</b>	<b>JA03911A</b>	<b>Headphone Holder Ass'y</b> Serial No.: A12301001 -	<b>1</b>
01	0B08511A	Headphone Jack	1
02	0J04528C	Headphone Jack Holder	1
L01	-	Headphone Jack Washer	(1)
L02	-	Headphone Jack Nut	(1)
<b>B02</b>	<b>CA08378A</b>	<b>Mechanism Ass'y LX-5</b> Serial No.: A12305404 -	<b>1</b>
01	CA08333A	Flywheel Holder Ass'y	1
02	0C08096C	Capstan Belt	1
03	CA08169A	Supply Flywheel Ass'y D	1
04	CA08107A	Take-up Flywheel Ass'y	1
05	0C08021B	Thrust Washer 3.1mm	1
06	0C08020B	Thrust Washer 2.6mm	1
07	0C08243A	Flange Thrust Cap	2
08	0C08244A	Flange Thrust Spring	2
09	CA08343A	Sub Mechanism Chassis Ass'y	1
10	0C08099B	Control Motor Belt	1
11	0C08098B	Counter Belt B	1
12	CA08377A	Main Mechanism Chassis Ass'y	1
13	0B08672A	3P-H Connector	1
14	0B08947A	9P-H Connector	1
15	0B08515A	Insu-Lock	10
16	0M03902A	Motor Label	1
-	0M04327A	Mechanism Serial No. Seal	1
L01	0E00834A	BT Screw M3x30 Philips Pan Head	1
L02	0E00178A	Washer 3mm	2
L03	0E00833A	BT Screw M3x20 Philips Pan Head	3
L04	0E00883A	BT Screw M3x18 Philips Pan Head	5
L05	0E00835A	BT Screw M3x25 Philips Pan Head	1

Schematic Ref. No.	Part No.	Description	Q'ty
<b>B02</b>	<b>CA08327A</b>	<b>Mechanism Ass'y LX-5</b> Serial Nos.: A12301001 - A12305403	<b>1</b>
01	CA08333A	Flywheel Holder Ass'y	1
02	0C08096C	Capstan Belt	1
03	CA08169A	Supply Flywheel Ass'y D	1
04	CA08107A	Take-up Flywheel Ass'y	1
05	0C08021B	Thrust Washer 3.1mm	1
06	0C08020B	Thrust Washer 2.6mm	1
07	0C08243A	Flange Thrust Cap	2
08	0C08244A	Flange Thrust Spring	2
09	CA08343A	Sub Mechanism Chassis Ass'y	1
10	0C08099B	Control Motor Belt	1
11	0C08098B	Counter Belt B	1
12	CA08329A	Main Mechanism Chassis Ass'y	1
13	0B08672A	3P-H Connector	1
14	0B08947A	9P-H Connector	1
15	0B08515A	Insu-Lock	10
16	0M03902A	Motor Label	1
-	0M04327A	Mechanism Serial No. Seal	1
L01	0E00834A	BT Screw M3x30 Philips Pan Head	1
L02	0E00178A	Washer 3mm	2
L03	0E00833A	BT Screw M3x20 Philips Pan Head	3
L04	0E00883A	BT Screw M3x18 Philips Pan Head	5
L05	0E00835A	BT Screw M3x25 Philips Pan Head	1

8.7. Flywheel Holder Ass'y (C01)

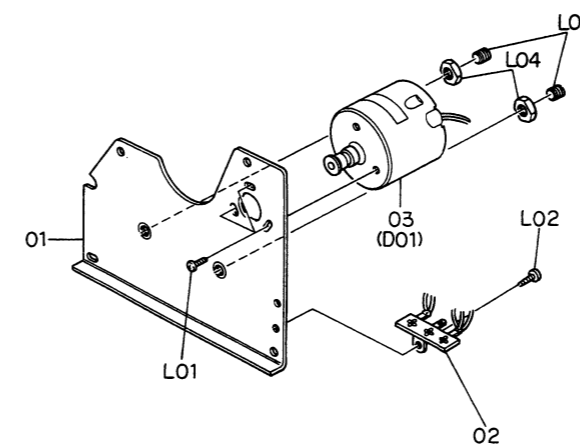


Fig. 8.7

8.8. Sub Mechanism Chassis Ass'y (C02)

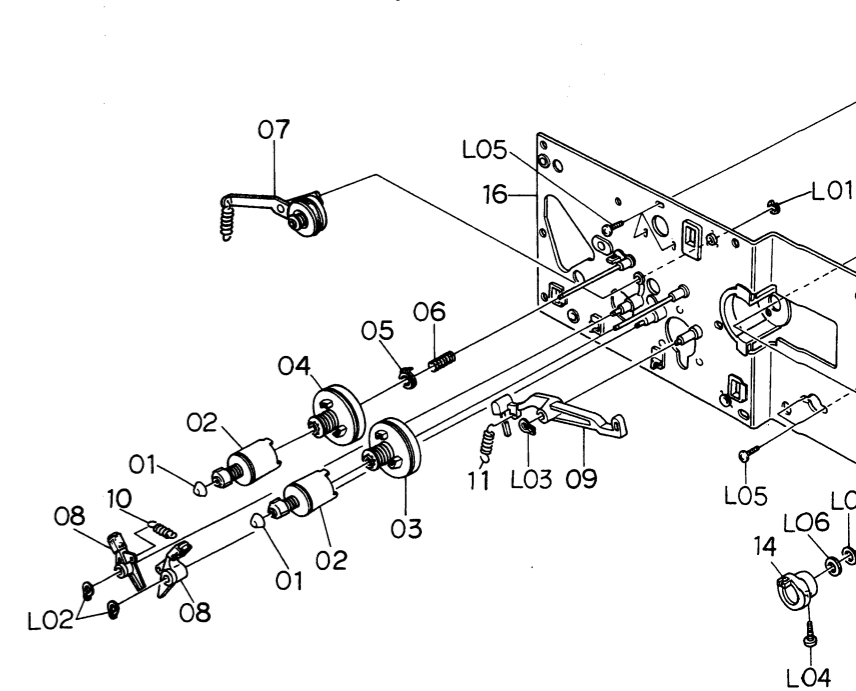
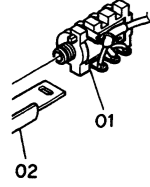


Fig. 8.8

8.4. Phone Holder Ass'y (B01)



8.5. Mechanism Ass'y LX-5 (B02)

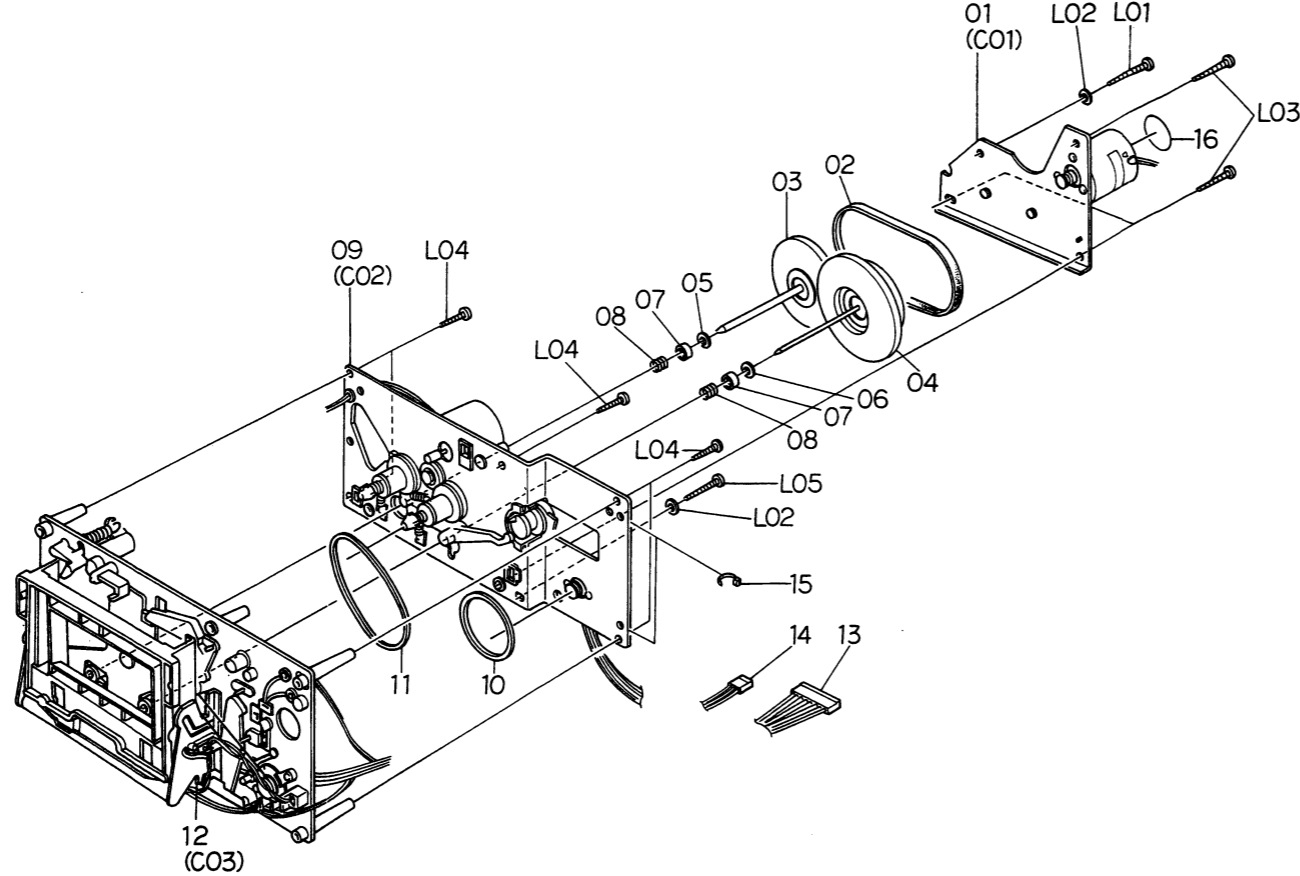


Fig. 8.5

8.6. Rear Panel Ass'y (B03)

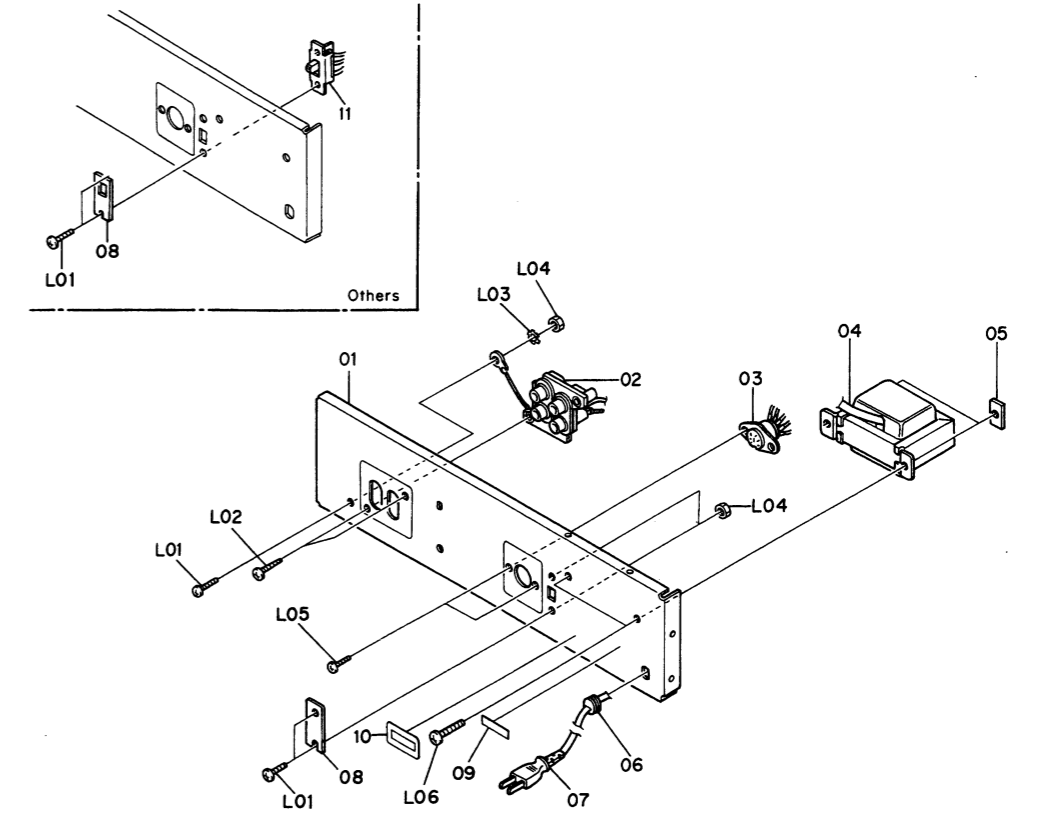


Fig. 8.6

Description	Q'ty
Phone Holder Ass'y Serial No.: A12301001 -	1
Phone Jack	1
Phone Jack Holder	1
Phone Jack Washer	(1)
Phone Jack Nut	(1)

Schematic Ref. No.	Part No.	Description	Q'ty
B02	CA08327A	Mechanism Ass'y LX-5 Serial Nos.: A12301001 - A12305403	1
01	CA08333A	Flywheel Holder Ass'y	1
02	0C08096C	Capstan Belt	1
03	CA08169A	Supply Flywheel Ass'y D	1
04	CA08107A	Take-up Flywheel Ass'y	1
05	0C08021B	Thrust Washer 3.1mm	1
06	0C08020B	Thrust Washer 2.6mm	1
07	0C08243A	Flange Thrust Cap	2
08	0C08244A	Flange Thrust Spring	2
09	CA08343A	Sub Mechanism Chassis Ass'y	1
10	0C08099B	Control Motor Belt	1
11	0C08098B	Counter Belt B	1
12	CA08329A	Main Mechanism Chassis Ass'y	1
13	0B08672A	3P-H Connector	1
14	0B08947A	9P-H Connector	1
15	0B08515A	Insu-Lock	10
16	0M03902A	Motor Label	1
-	0M04327A	Mechanism Serial No. Seal	1
L01	0E00834A	BT Screw M3x30 Philips Pan Head	1
L02	0E00178A	Washer 3mm	2
L03	0E00833A	BT Screw M3x20 Philips Pan Head	3
L04	0E00883A	BT Screw M3x18 Philips Pan Head	5
L05	0E00835A	BT Screw M3x25 Philips Pan Head	1

8.7. Flywheel Holder Ass'y (C01)

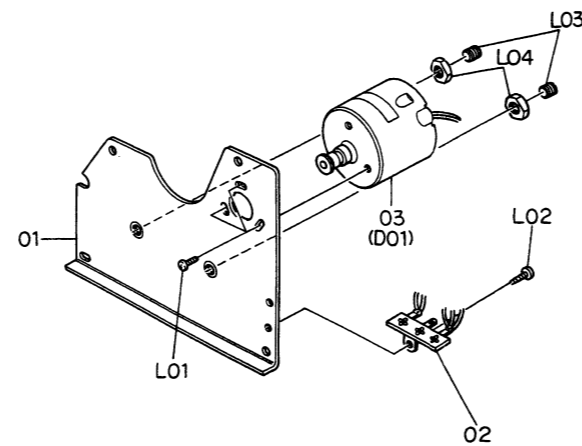


Fig. 8.7

8.8. Sub Mechanism Chassis Ass'y (C02)

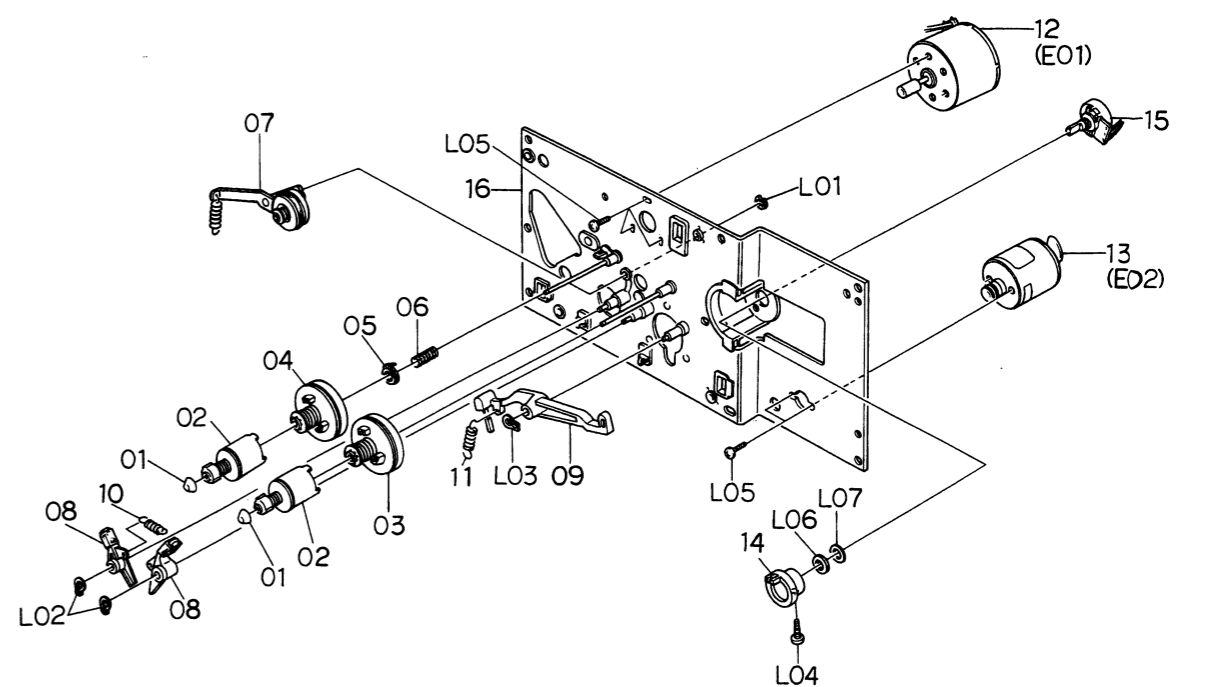


Fig. 8.8

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
B03	HA04246A	Rear Panel Ass'y (Japan)	1	C01	CA08333A	Flywheel Holder Ass'y Serial No.: A12301001 -	1
	HA04247A	Rear Panel Ass'y (U.S.A. & Canada)	1				
	HA04248A	Rear Panel Ass'y (220V Class 2)	1				
	HA04249A	Rear Panel Ass'y (UK)	1				
	HA04250A	Rear Panel Ass'y (Australia)	1				
	HA04251A	Rear Panel Ass'y (Others) Serial No.: A12301001 -	1				
01	OH04051A	Rear Panel	1	L03	OC08068C	Thrust Screw	2
02	BA04630A	Pin Jack Ass'y	1	L04	OC03857A	Lock Nut	2
03	BA04629A	8P DIN Socket Ass'y	1	C02	CA08343A	Sub Mechanism Chassis Ass'y Serial No.: A12301001 -	1
04	OB06663A	Power Transformer (Others)	1				
	OB06664B	Power Transformer (220V Class 2, UK & Australia)	1				
	OB06665A	Power Transformer (U.S.A. & Canada)	1				
	OB06666A	Power Transformer (Japan)	1				
05	OC01162B	Bolt Receptacle Plate	2				
06	OB08037U	Cord Bushing (U.S.A., Canada, Japan, 220V Class 2, Australia & Others)	1				
	OB08351A	Cord Bushing 4K-4 (UK)	1				
07	OB08533A	Power Cord (U.S.A. & Canada)	1				
	OB08219B	Power Cord (Japan)	1				
	OB08093U	Power Cord (220V Class 2)	1				
	OB08348A	Power Cord (UK)	1				
	OB05241A	Power Cord (Australia)	1				
	OB08533A	Power Cord (Others)	1				
08	OJ03663C	Switch Cover (U.S.A., Canada, Japan, 220V Class 2, UK & Australia)	1				
	OM03946A	Voltage Selector Lock Plate C (Others)	1				
09	OM03797A	Voltage Label 240V (UK & Australia)	1				
	OM03796A	Voltage Label 220V (220V Class 2)	1				
	OM04293A	Voltage Label 120V/220V-240V (Others)	1				
10	OM03551B	Pass Label	1				
11	OB07092U	Voltage Selector (Others)	1				
L01	OE00594A	Screw M3x8 Philips Binding Head (Bronze)	3				
L02	OE00921A	BT Screw M3x8 Philips Binding Head (Black Chromate)	2				
L03	OE00172A	Washer 3mm Toothed Lock	1				
L04	OE00507A	Nut Hex. M3	3				
L05	OE00714A	Screw M2.6x6 Philips Binding Head (Bronze)	2				
L06	OE00953A	Screw M4x10 Philips Binding Head (Black Chromate)	2				
-	OM04319A	Serial Number Plate	1				
-	OM04113A	LA Label (U.S.A. & Canada)	1				
-	OM04185A	FSZ Label (220V Class 2)	1				
-	OM04263A	EP Label (220V Class 2)	1				
-	OM03844B	BS Code Label (UK)	1				
-	OJ03644A	Chobert Rivet	2				
-	OF01071A	Free-up Belt (220V Class 2, UK & Australia)	1				
				01	OC08013I	Flywheel Holder	1
				02	OB04042A	Earth Terminal 1L2P	1
				03	CA08118B	Capstan Motor Ass'y	1
				L01	OE00226A	Screw M2.6x4 Philips Pan Head	3
				L02	OE00843A	BT Screw M3x5 Philips Pan Head	1
				01	OC08039B	Reel Hub Head	2
				02	CA08038B	Reel Hub B Supply Ass'y	2
				03	CA08037A	Reel Hub Take-up Ass'y	1
				04	CA08064A	Reel Hub Supply Ass'y	1
				05	CA08039A	Back Tension Ass'y	1
				06	OC08269A	Back Tension Spring C	1
				07	CA08193A	Idler Ass'y	1
				08	CA08042A	Brake Ass'y	1
				09	OC08030C	Brake Drive Arm	1
				10	OC08129A	Brake Arm Spring	1
				11	OC08128A	Brake Drive Arm Spring	1
				12	CA08242A	Reel Motor Ass'y	1
				13	CA08034A	Control Motor Ass'y	1
				14	OC08053B	Volume Coupler	1
				15	OB07240A	Volume Control 10K (B)	1
				16	CA08194A	Sub Chassis Ass'y	1
				L01	OE00698A	E-Ring 2.5mm	1
				L02	OE00837A	Stopper Ring 3mm	2
				L03	OE00838A	Stopper Ring 4mm	1
				L04	OE00859A	BT Screw M2.6x6 Philips Binding Head	1
				L05	OE00226A	Screw M2.6x4 Philips Pan Head	5
				L06	-	Volume Nut	(1)
				L07	-	Volume Washer	(1)

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
C03	CA08377A	Main Mechanism Chassis Ass'y Serial No.: A12305404 —	1	C03	CA08329A	Main Mechanism Chassis Ass'y Serial Nos.: A12301001 — A12305403	1
01	CA08350A	Cassette Case Holder L Ass'y	1	01	CA08350A	Cassette Case Holder L Ass'y	1
02	OC08151A	Lid Arm Spring Tube	1	02	OC08151A	Lid Arm Spring Tube	1
03	CA08022A	Cassette Case Holder R Ass'y	1	03	CA08022A	Cassette Case Holder R Ass'y	1
04	CA08349A	Cassette Case Ass'y	1	04	CA08349A	Cassette Case Ass'y	1
05	CA08376A	Head Mount Base Ass'y	1	05	CA08331A	Head Mount Base Ass'y	1
06	OC08121A	Supply Pressure Roller Spring	1	06	OC08121A	Supply Pressure Roller Spring	1
07	OC08250A	Supply Pressure Roller Spring B	1	07	OC08250A	Supply Pressure Roller Spring B	1
08	OC08313A	Pressure Roller Arm Bushing	2	08	OC08313A	Pressure Roller Arm Bushing	2
09	CA08053B	Supply Pressure Roller Ass'y	1	09	CA08053B	Supply Pressure Roller Ass'y	1
10	OC08122B	Supply Pressure Roller Thrust Spring	1	10	OC08122B	Supply Pressure Roller Thrust Spring	1
11	CA08079B	Take-up Pressure Roller Ass'y	1	11	CA08079B	Take-up Pressure Roller Ass'y	1
12	OC08183B	Take-up Pressure Roller Thrust Spring	1	12	OC08183B	Take-up Pressure Roller Thrust Spring	1
13	CA08339A	Head Base Ass'y	1	13	CA08339A	Head Base Ass'y	1
14	OC08182A	Pressure Roller Drive Bar B	1	14	OC08182A	Pressure Roller Drive Bar B	1
15	OC08086B	Head Base Roller	3	15	OC08086B	Head Base Roller	3
16	OC08050B	Record Sensor	1	16	OC08050B	Record Sensor	1
17	OC08051E	Cassette Hold Arm	1	17	OC08051E	Cassette Hold Arm	1
18	OC08120A	Cassette Hold Arm Spring	1	18	OC08120A	Cassette Hold Arm Spring	1
19	CA08196A	Back Tension Ass'y	1	19	CA08196A	Back Tension Ass'y	1
20	OC08254A	Back Tension Arm Collar	1	20	OC08254A	Back Tension Arm Collar	1
21	CA08027A	Head Base Drive Arm Ass'y	1	21	CA08027A	Head Base Drive Arm Ass'y	1
22	OC08143C	Head Base Drive Arm Spring	1	22	OC08143C	Head Base Drive Arm Spring	1
23	CA08026A	Pressure Roller Drive Arm Ass'y	1	23	CA08026A	Pressure Roller Drive Arm Ass'y	1
24	CA08353A	Auto Shut-off Ass'y	1	24	CA08353A	Auto Shut-off Ass'y	1
25	OC08119A	Record Protector	1	25	OC08119A	Record Protector	1
26	OC08194C	Damper Lock Arm	1	26	OC08194C	Damper Lock Arm	1
27	OC08153A	Damper Lock Arm Spring Tube	1	27	OC08153A	Damper Lock Arm Spring Tube	1
28	OC08116A	Record Arm Spring	1	28	OC08116A	Record Arm Spring	1
29	CA08030A	Pneumatic Damper Ass'y	1	29	CA08030A	Pneumatic Damper Ass'y	1
30	CA08023A	Supply Capstan Flange Ass'y	1	30	CA08023A	Supply Capstan Flange Ass'y	1
31	CA08024A	Take-up Capstan Flange Ass'y	1	31	CA08024A	Take-up Capstan Flange Ass'y	1
32	OC08186A	Cam Drive Gear	1	32	OC08186A	Cam Drive Gear	1
33	OC08029H	Control Cam	1	33	OC08029H	Control Cam	1
34	OC08117A	Counter-Load Arm Spring	1	34	OC08117A	Counter-Load Arm Spring	1
35	OC08152A	Counter-Load Arm Spring Tube	1	35	OC08152A	Counter-Load Arm Spring Tube	1
36	CA08028A	Counter-Load Arm Ass'y	1	36	CA08028A	Counter-Load Arm Ass'y	1
37	CA08347A	Main Chassis Ass'y	1	37	CA08347A	Main Chassis Ass'y	1
L01	0E00837A	Stopper Ring 3mm	9	L01	0E00837A	Stopper Ring 3mm	9
L02	0E00834A	BT Screw M3x30 Philips Pan Head	2	L02	0E00834A	BT Screw M3x30 Philips Pan Head	2
L03	0E00831A	BT Screw M3x10 Philips Pan Head	3	L03	0E00831A	BT Screw M3x10 Philips Pan Head	3
L04	0E00254A	Washer 3.1mm	2	L04	0E00254A	Washer 3.1mm	2
L05	0E00222A	E-Ring 2mm	2	L05	0E00222A	E-Ring 2mm	2
L06	0E00876A	BT Screw M2.6x8 Philips Pan Head	8	L06	0E00876A	BT Screw M2.6x8 Philips Pan Head	8
L07	0E00178A	Washer 3mm	2	L07	0E00178A	Washer 3mm	2
L08	0E00879A	BT Screw M2x15 Philips Pan Head	1	L08	0E00879A	BT Screw M2x15 Philips Pan Head	1
L09	0E00838A	Stopper Ring 4mm	3	L09	0E00838A	Stopper Ring 4mm	3
L10	0E00846A	BT Screw M3x8 Philips Pan Head	3	L10	0E00846A	BT Screw M3x8 Philips Pan Head	3
L11	0E00895A	Earth Lug 3mm	2	L11	0E00895A	Earth Lug 3mm	2
L12	0E00859A	BT Screw M2.6x6 Philips Binding Head	1	L12	0E00859A	BT Screw M2.6x6 Philips Binding Head	1
L13	OC08255A	Washer 2.6mm	1	L13	OC08255A	Washer 2.6mm	1



8.9. Main Mechanism Chassis Ass'y (C03)

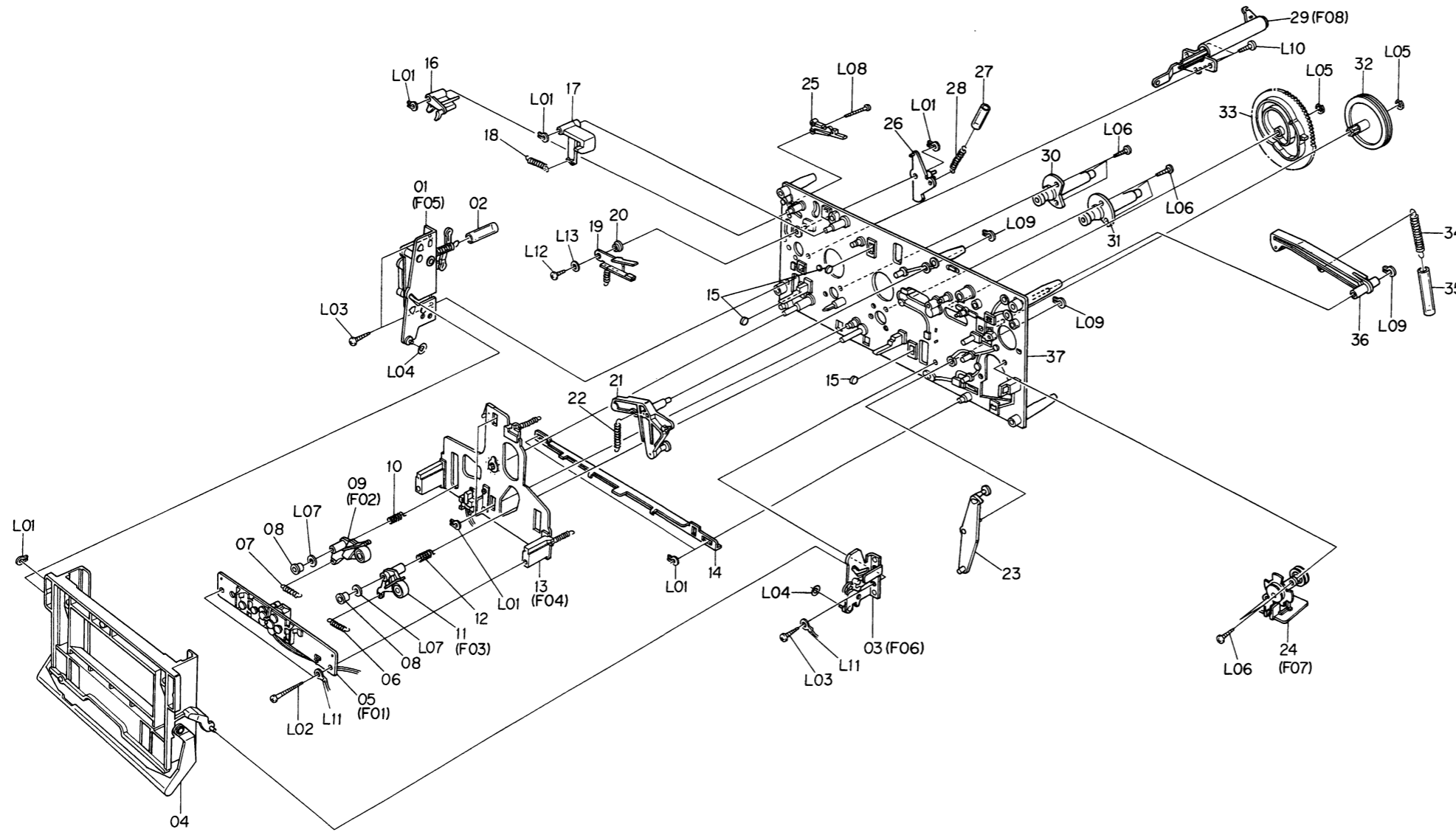


Fig. 8.9

Schematic Ref. No.	Part No.	Description	Q'ty
<b>D01</b>	<b>CA08118B</b>	<b>Capstan Motor Ass'y</b> Serial No.: A12301001 -	<b>1</b>
01	0C08219A	Capstan Motor	1
02	0C08212C	Capstan Motor Pulley	1
03	0M04077A	Motor Seal	1
<b>E01</b>	<b>CA08242A</b>	<b>Reel Motor Ass'y</b> Serial No.: A12301001 -	<b>1</b>
01	0C08272A	Reel Motor	1
02	0C08063F	Reel Motor Pulley	1
03	0B09290A	Ceramic Capacitor 0.01μ 50V Z	1
<b>E02</b>	<b>CA08034A</b>	<b>Control Motor Ass'y</b> Serial No.: A12301001 -	<b>1</b>
01	0C08137A	Control Motor	1
02	0C08064A	Control Motor Pulley	1
03	0B09292A	Ceramic Capacitor 0.1μ 50V Z	1
04	0M03985A	Control Motor Label	1
05	0M03988A	Motor Seal B	1

8.10. Capstan Motor Ass'y (D01)

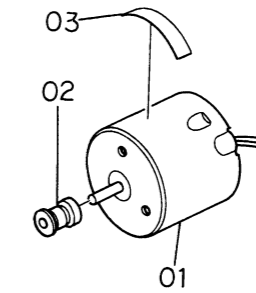


Fig. 8.10

8.12. Control Motor Ass'y (E02)

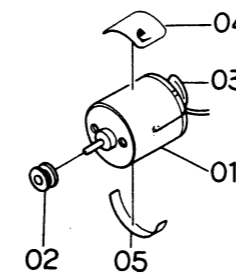


Fig. 8.12

8.11. Reel Motor Ass'y (E01)

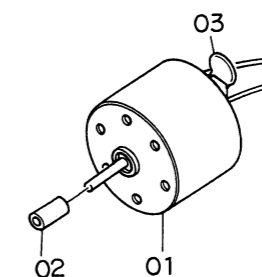


Fig. 8.11

8.13. Head Mount Base Ass'y (F01)

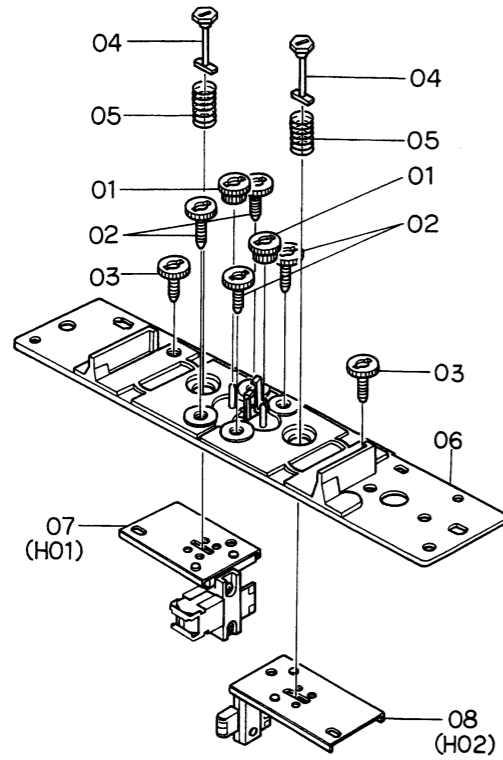


Fig. 8.13

8.14. Supply Pressure Roller Ass'y (F02)

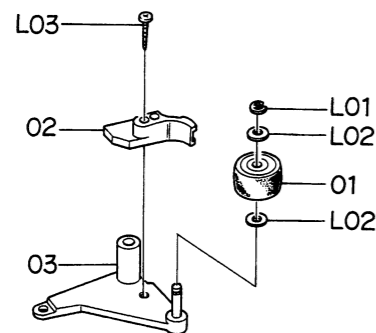


Fig. 8.14

8.15. Take-up Pressure Roller Ass'y (F03)

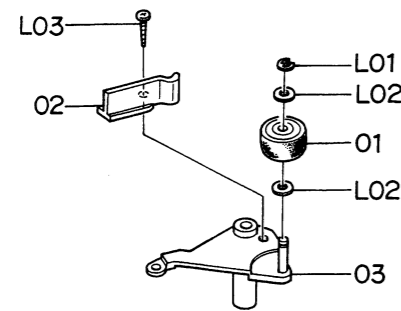


Fig. 8.15

8.16. Head Base Ass'y (F04)

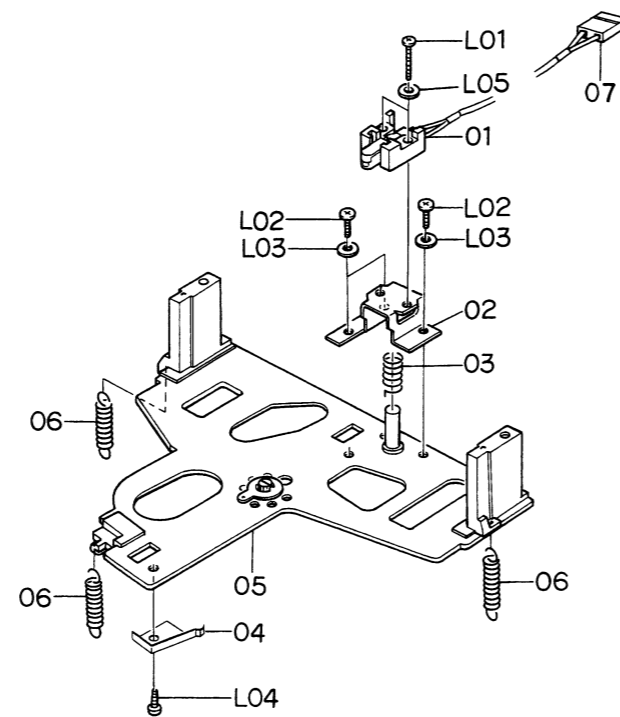


Fig. 8.16

8.17. Cassette Case Holder L Ass'y (F05)

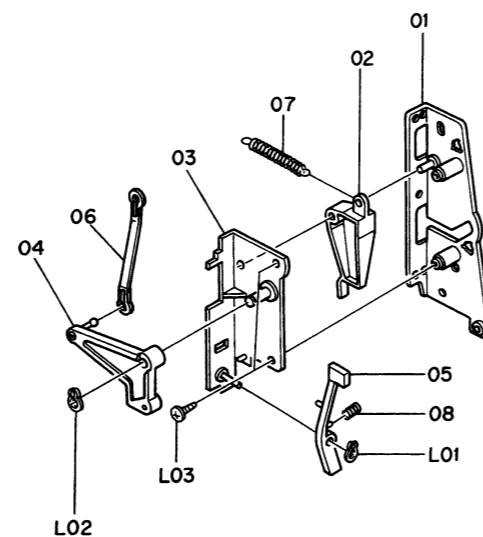


Fig. 8.17

8.18. Cassette Case Holder R Ass'y (F06)

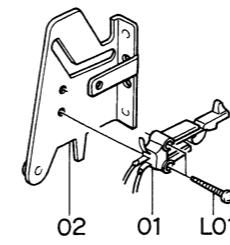


Fig. 8.18

8.19. Auto Shut-off Ass'y (F07)

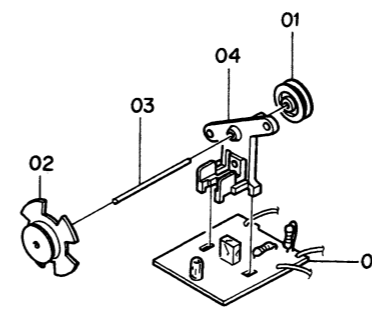


Fig. 8.19

8.20. Pneumatic Damper Ass'y (F08)

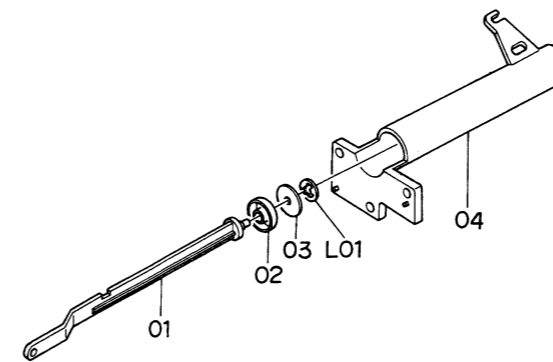


Fig. 8.20

Schematic Ref. No.	Part No.	Description	Q'ty
F01	CA08376A	Head Mount Base Ass'y Serial No.: A12305404 -	1
01	0C08028C	Head Height Adjustment Gear	2
02	0C08027F	Head Height Adjustment Screw	4
03	0C08026D	Azimuth Alignment Screw	2
04	0C08161B	Spring Stopper	2
05	0C08187B	Head Plate Spring	1
06	CA08354A	Head Mount Base Sub Ass'y	1
07	CA08332A	P-8L Playback Head Ass'y	1
08	CA08375A	R-8L Record Head Ass'y	1
F01	CA08331A	Head Mount Base Ass'y Serial Nos.: A12301001 - A12305403	1
01	0C08028C	Head Height Adjustment Gear	2
02	0C08027F	Head Height Adjustment Screw	4
03	0C08026D	Azimuth Alignment Screw	2
04	0C08161B	Spring Stopper	2
05	0C08187B	Head Plate Spring	2
06	CA08354A	Head Mount Base Sub Ass'y	1
07	CA08332A	P-8L Playback Head Ass'y	1
08	CA08330A	R-8L Record Head Ass'y	1
F02	CA08053B	Supply Pressure Roller Ass'y Serial No.: A12301001 -	1
01	0C08164G	Pressure Roller	1
02	0C08189C	Supply Tape Guide	1
03	CA08061A	Supply Pressure Roller Arm Ass'y	1
L01	0E00042A	E-Ring 1.5mm	1
L02	0C08024A	Washer 2mm	2
L03	0E00788A	BT Screw M2x8 Philips Pan Head (Black Chromate)	1
F03	CA08079B	Take-up Pressure Roller Ass'y Serial No.: A12301001 -	1
01	0C08164G	Pressure Roller	1
02	0C08181C	Take-up Tape Guide	1
03	CA08073B	Take-up Pressure Roller Arm Ass'y	1
L01	0E00042A	E-Ring 1.5mm	1
L02	0C08024A	Washer 2mm	2
L03	0E00788A	BT Screw M2x8 Philips Pan Head (Black Chromate)	1
F04	CA08339A	Head Base Ass'y Serial No.: A12301001 -	1
01	GA02103A	E0K Erase Head	1
02	0C08158D	Erase Head Hold Plate	1
03	0C08166A	Erase Head Hold Plate Spring	1
04	0C08174D	Cassette Hold Spring	1
05	CA08003Q	Head Base Ass'y	1
06	0C08175A	Head Base L Spring	3
07	0B08949A	2P-H Connector	1
L01	0E00951A	Screw M1.7x7 Philips Pan Head (Black Chromate)	2

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty				
L02	0E00909A	Screw M2x6 Philips Pan Head	3	H02	CA08375A	R-8L Record Head Ass'y Serial No.: A12305404 -	1				
L03	0E00117A	Washer 2mm	3								
L04	0E00853A	BT Screw M2x3 Philips Pan Head	1								
L05	0E00952A	Washer 1.7mm	2								
F05	CA08350A	Cassette Case Holder L Ass'y Serial No.: A12301001 -	1					01	0C08308B	Record Head Plate	1
01	CA08326A	Cassette Case Holder L Sub Ass'y	1	02	GA01050A	R-8L Record Head	1				
02	0C08073C	Lid Arm A	1	03	0B02236A	4P-H Connector	1				
03	0C08306A	Eject Arm Holder	1	L01	0E00887A	Screw M1.7x4 Philips Pan Head	2				
04	0C08307A	Eject Arm A	1	-	0M04226A	Label CN-20	1				
05	0C08197C	Eject Arm B	1	H02	CA08330A	R-8L Record Head Ass'y Serial Nos.: A12301001 - A12305403	1				
06	0C08199B	Eject Arm Joint	1					01	0C08308B	Record Head Plate	1
07	0C08114A	Lid Arm Spring	1					02	GA01050A	R-8L Record Head	1
08	0C08211C	Eject Arm Spring	1					03	0B08951A	4P-H Connector	1
L01	0E00837A	Stopper Ring 3mm	1					L01	0E00887A	Screw M1.7x4 Philips Pan Head	2
L02	0E00838A	Stopper Ring 4mm	1					-	0M04226A	Label CN-20	1
L03	0E00865A	BT Screw M3x10 Philips Binding Head	2								
F06	CA08022A	Cassette Case Holder R Ass'y Serial No.: A12301001 -	1								
01	0C08133A	Eject Sensor	1								
02	CA08044A	Cassette Case Holder R Sub Ass'y	1								
L01	0E00840A	BT Screw M2x8 Philips Pan Head	2								
F07	CA08353A	Auto Shut-off Ass'y Serial No.: A12301001 -	1								
01	0C08047A	Shut-off Pulley A	1								
02	0C08309A	Shut-off Pulley B	1								
03	0C08088B	Shut-off Pulley Shaft	1								
04	0C08207B	Shut-off Pulley Holder	1								
05	BA04637A	Shut-off P.C B. Ass'y	1								
F08	CA08030A	Pneumatic Damper Ass'y Serial No.: A12301001 -	1								
01	0C08058C	Damper Piston	1								
02	0C08102C	Damper Ring	1								
03	0C08010C	Damper Plate	1								
04	0C08059D	Sylinder	1								
L01	0E00874A	Stopper Ring CS 2mm	1								
H01	CA08332A	P-8L Playback Head Ass'y Serial No.: A12301001 -	1								
01	CA08307A	Playback Head Plate Ass'y	1								
02	GA02034A	P-8L Playback Head	1								
03	0C08169D	Pad Lifter 54	1								
04	0B08950A	4P-H Connector Ass'y	1								
L01	0E00886A	Screw M1.7x6.5 Philips Pan Head	2								
-	0M04232A	Label CN-21	1								

8.21. P-RL Playback Head Ass'y (H01)

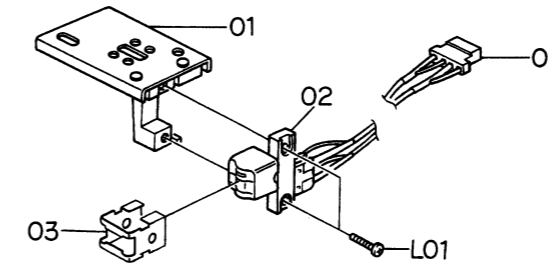


Fig. 8.21

8.22. R-8L Record Head Ass'y (H02)

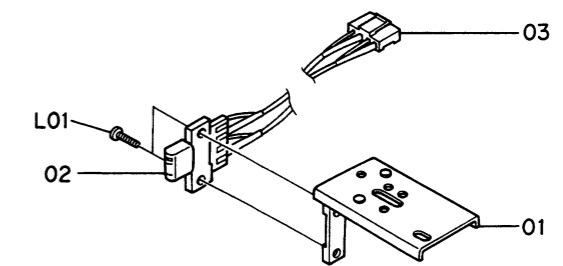


Fig. 8.22.1 Serial No.: A12305404 -

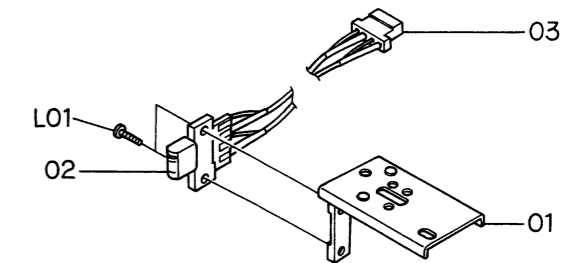


Fig. 8.22.2 Serial Nos.: A12301001 - A12305403

9. OVERALL TIMING CHART

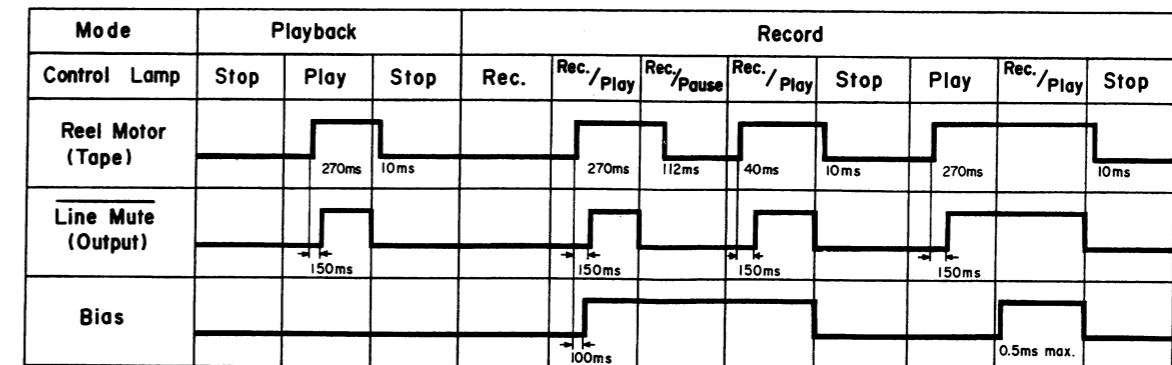


Fig. 9

# 10. BLOCK DIAGRAMS

## 10.1. Amplifier Section

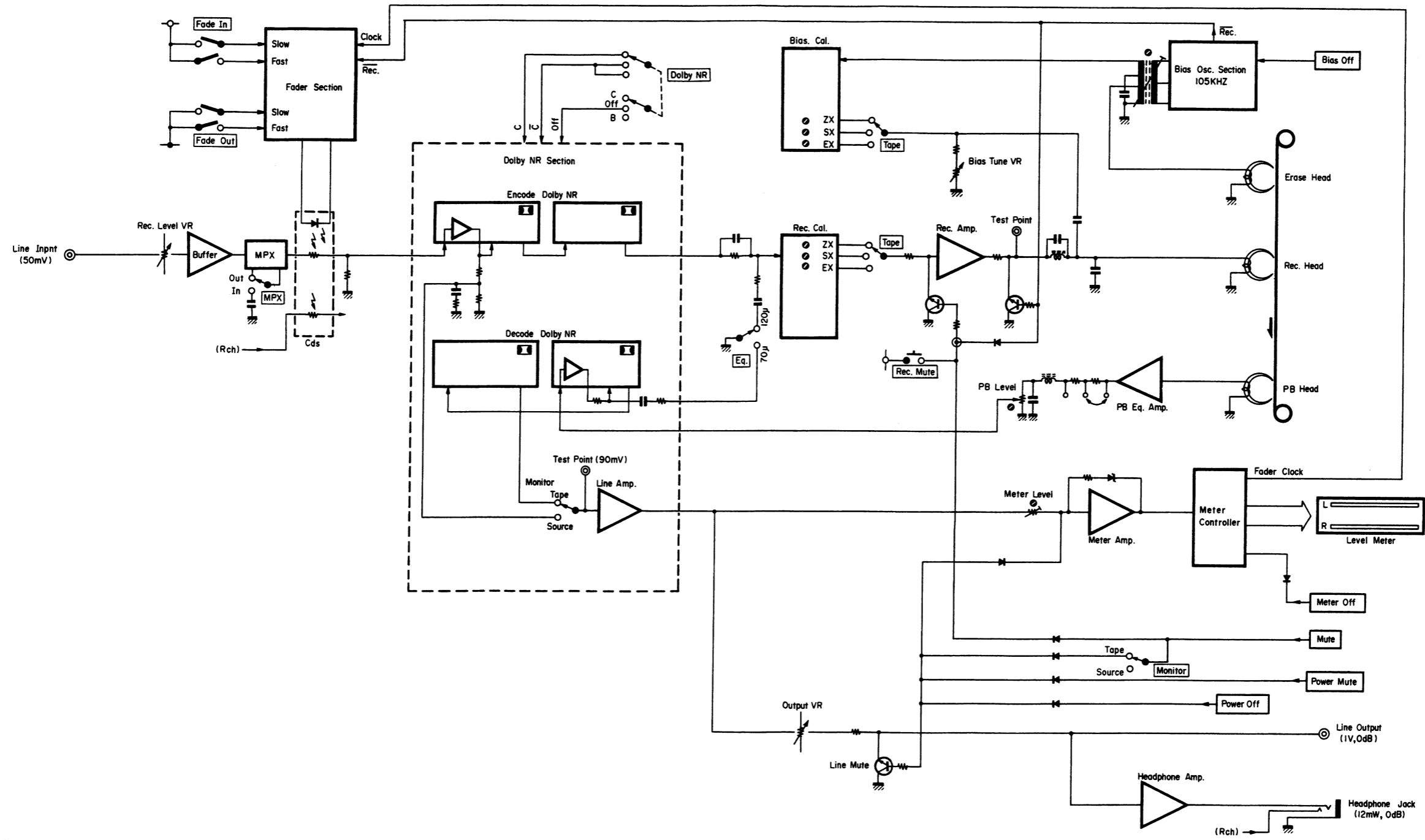


Fig. 10.1

10.2. Mechanism Control Section

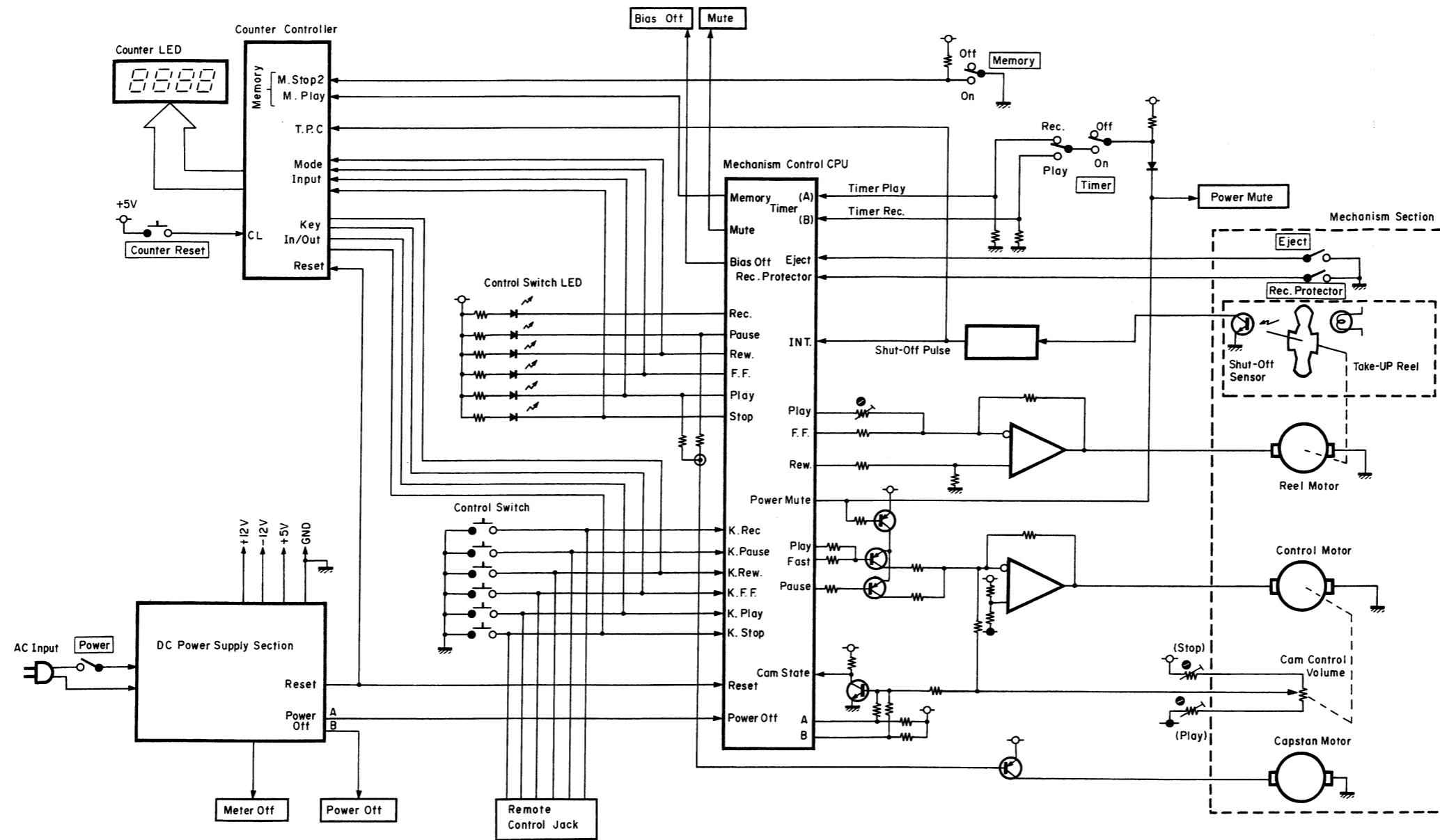


Fig. 10.2

## 11. EQ. AMP. FREQUENCY RESPONSE

### 11.1. Playback Frequency Response

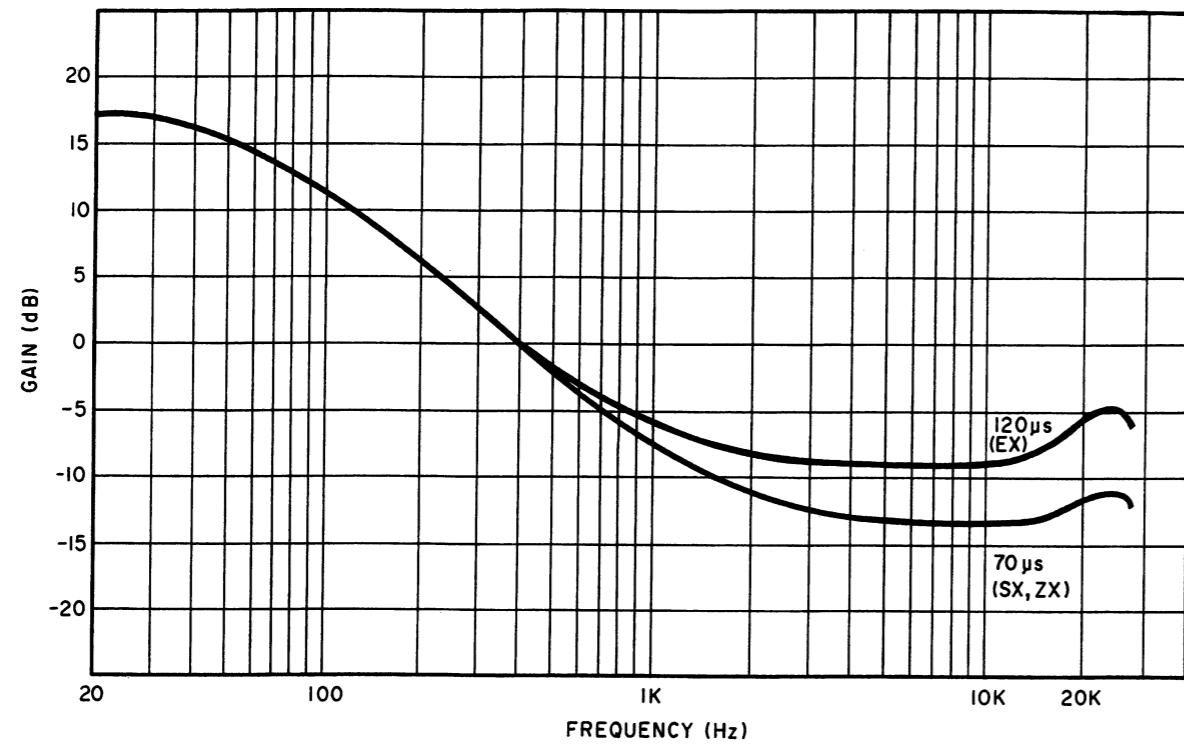


Fig. 11.1

### 11.2. Record Current Frequency Response

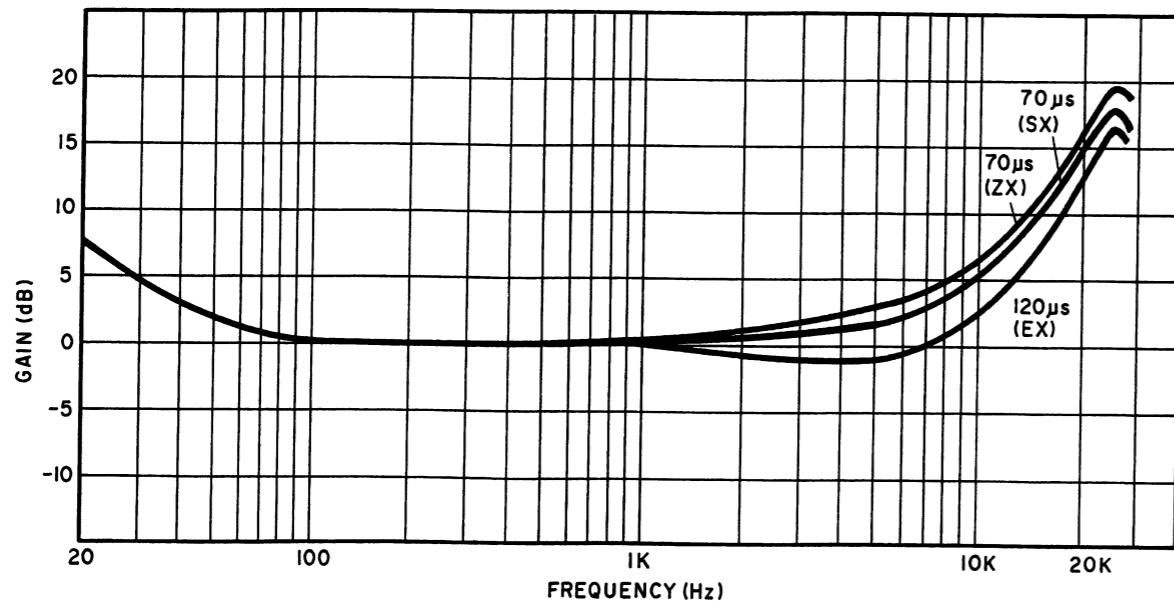


Fig. 11.2

## 12. WIRING DIAGRAMS

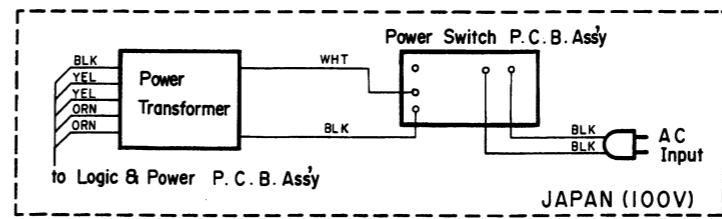
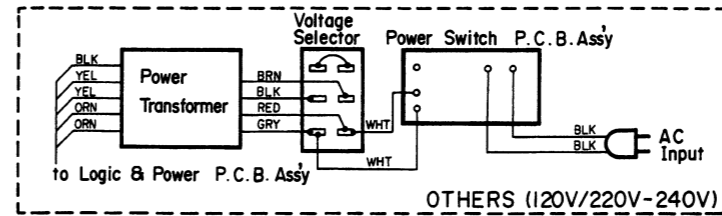
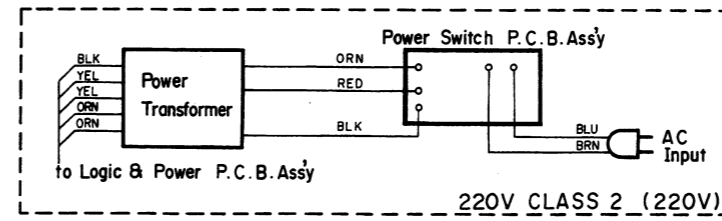
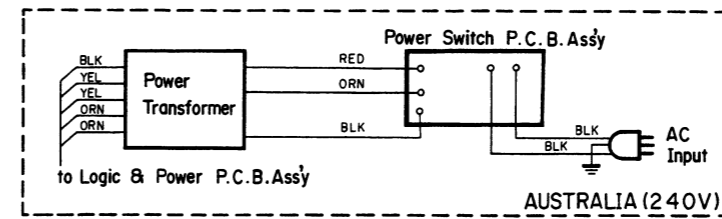
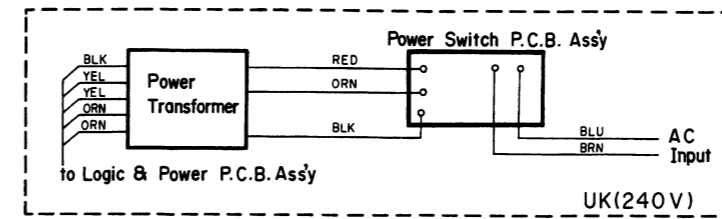


Fig. 12.1

Notes: 1. Table of wire colors

BLK - Black  
 BLU - Blue  
 ORN - Orange  
 GRY - Gray  
 GRN - Green  
 RED - Red  
 BRN - Brown  
 YEL - Yellow  
 WHT - White  
 VIO - Violet

2. Wire tube color is shown in ( ).  
 3. Component side view of the P.C.B. is illustrated unless otherwise specified.

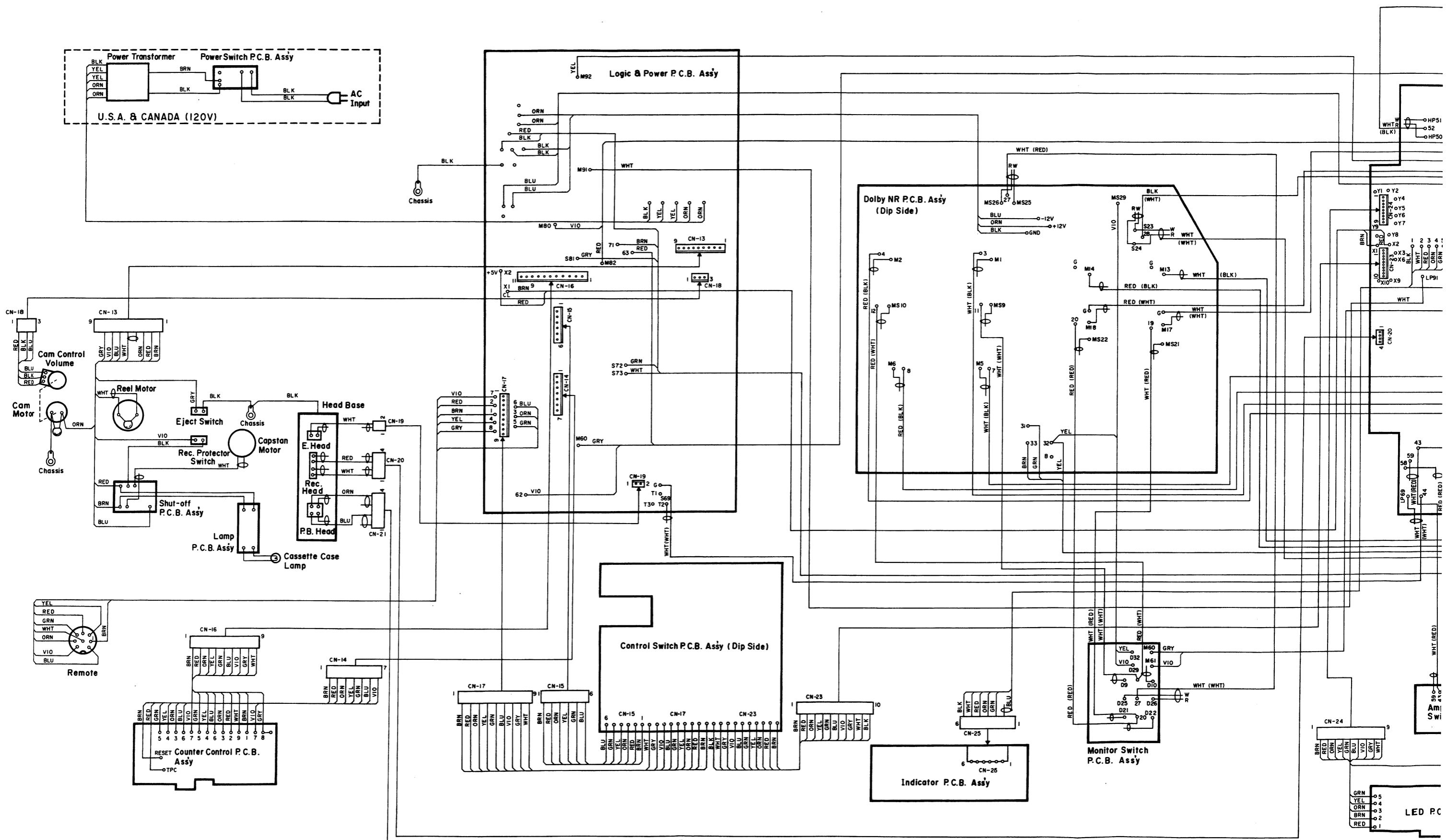


Fig. 12.2.1 Serial No.: A12305404 -

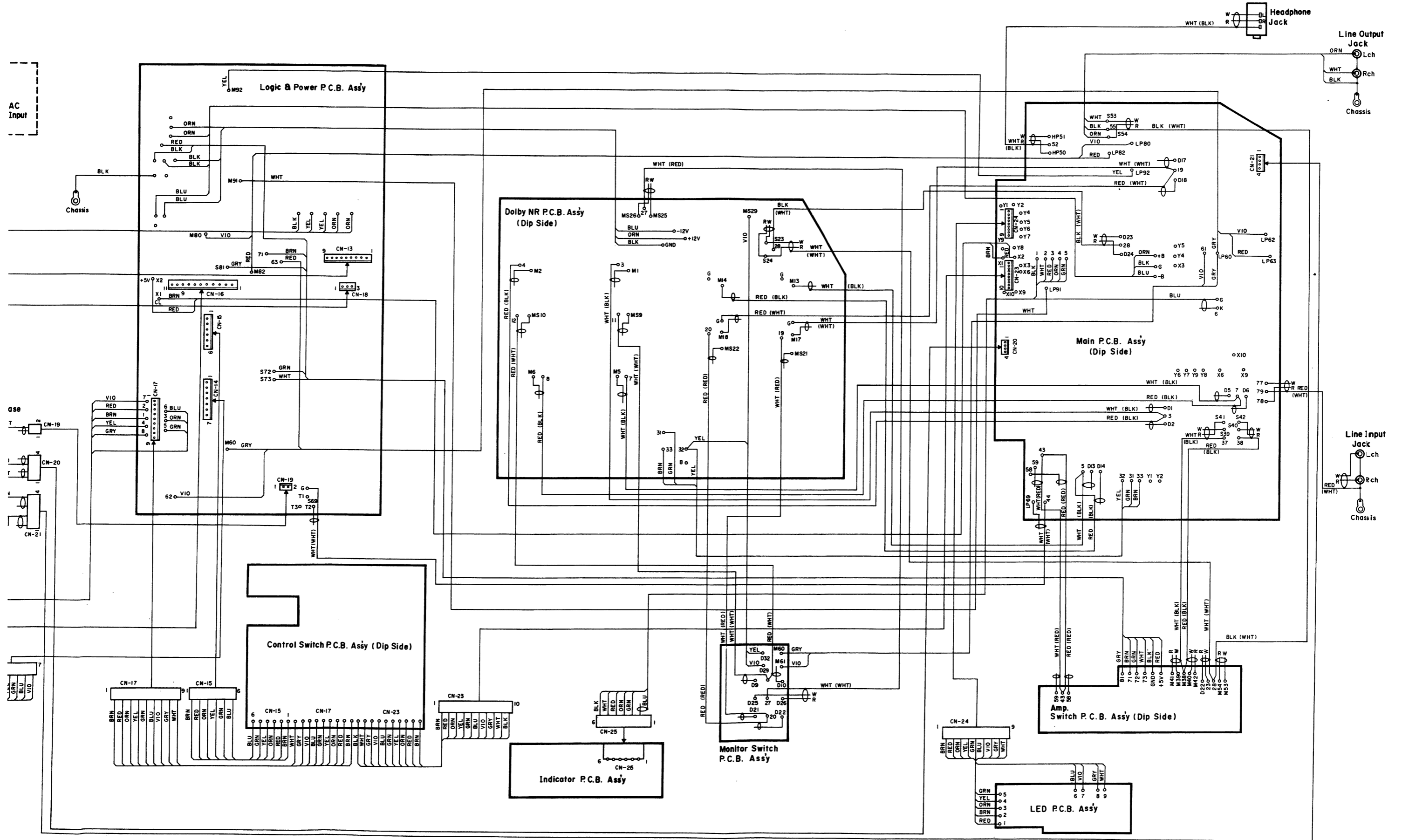


Fig. 12.2.1 Serial No.: A12305404 -



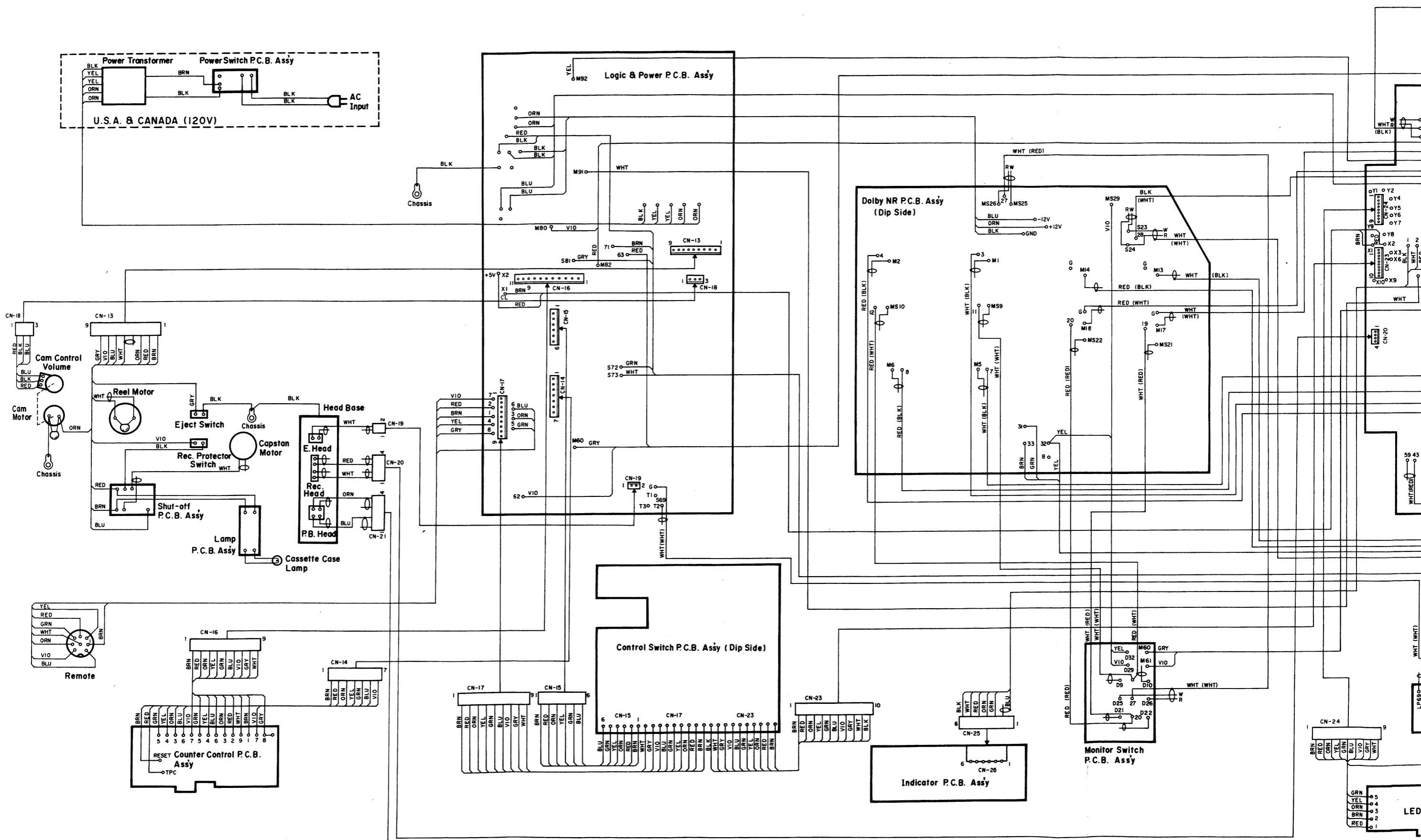


Fig. 12.2.2 Serial Nos.: A12301001 – A12305403

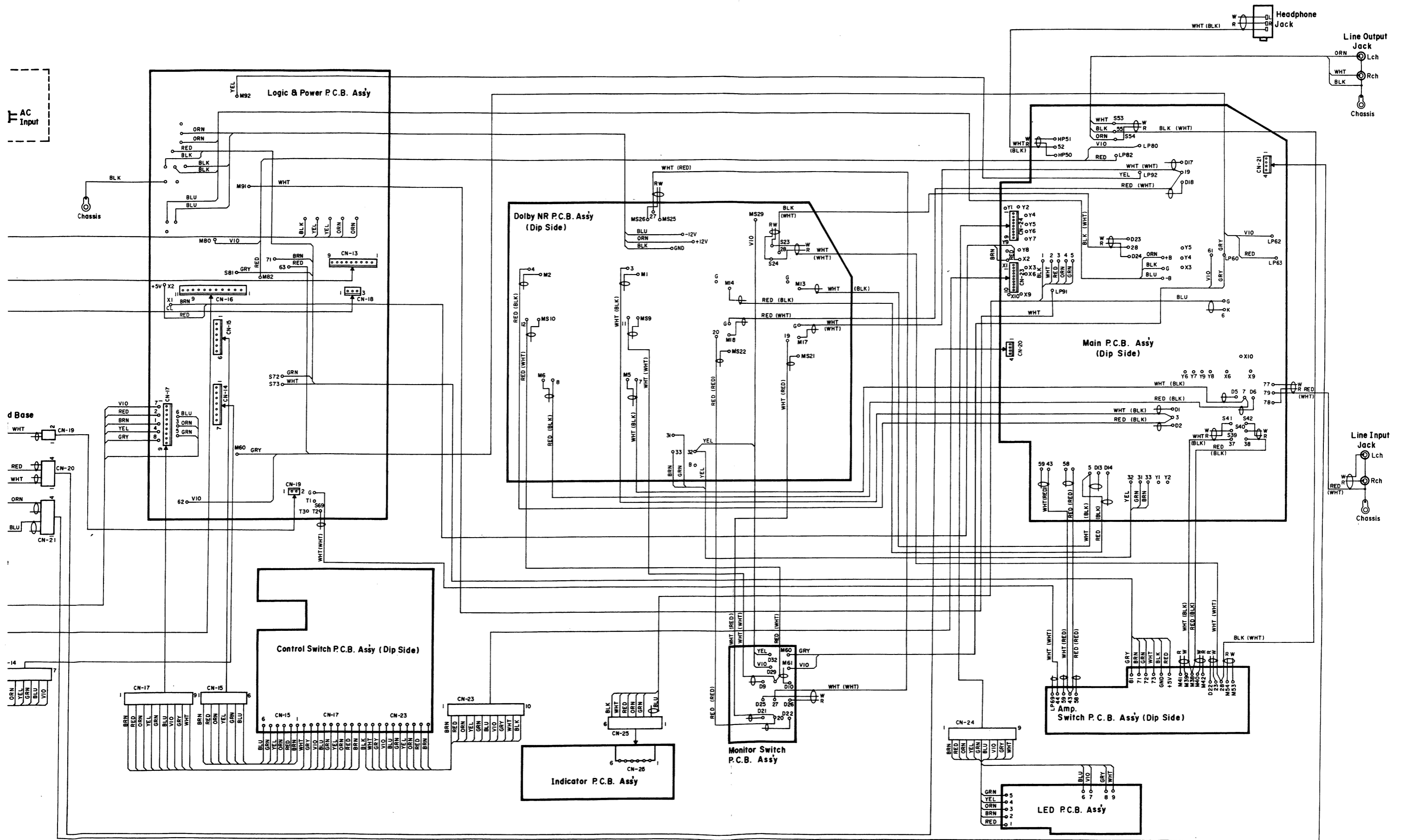


Fig. 12.2.2 Serial Nos.: A12301001 – A12305403

# 13. SCHEMATIC DIAGRAMS

## 13.1. Mechanism Control Section

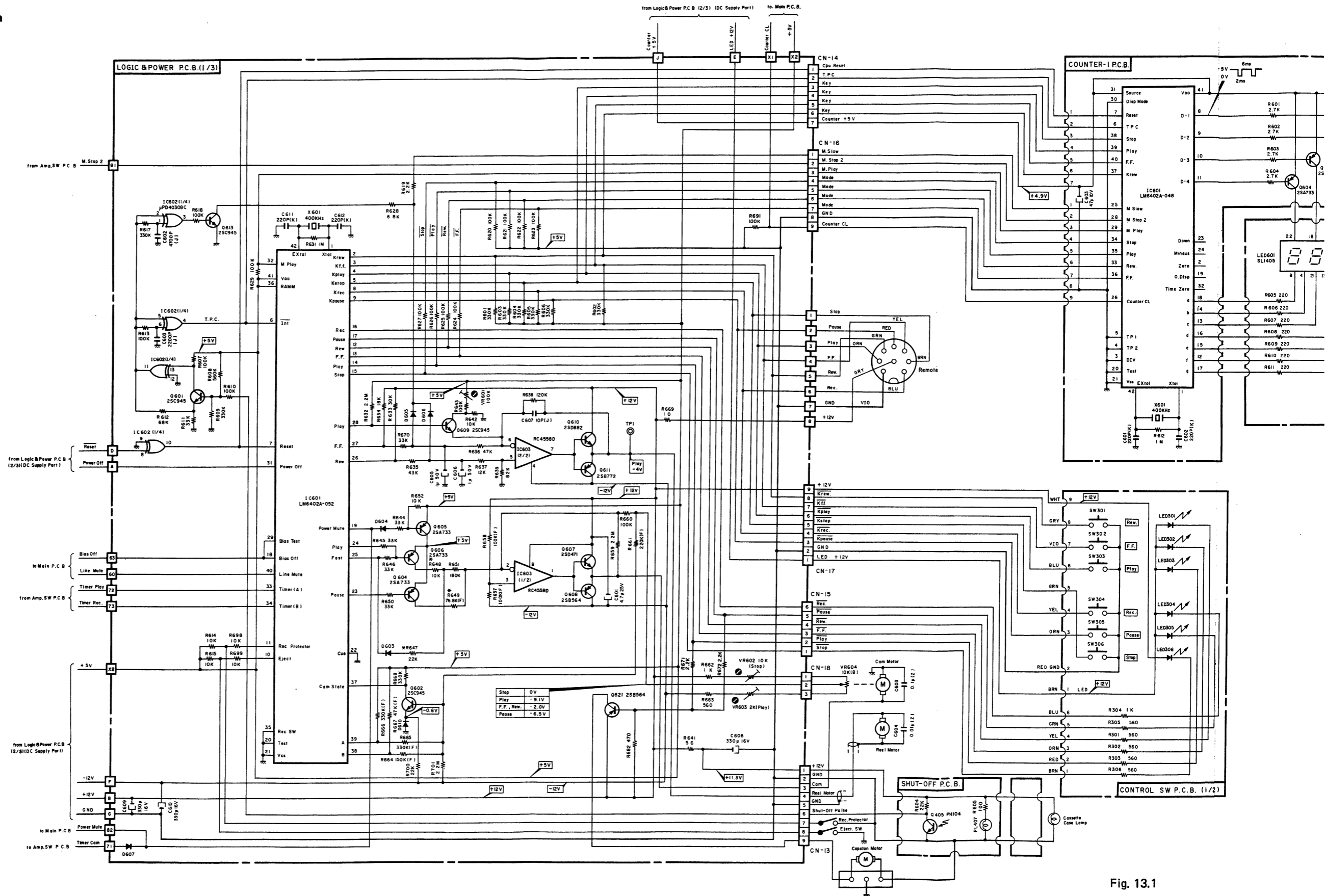


Fig. 13.1

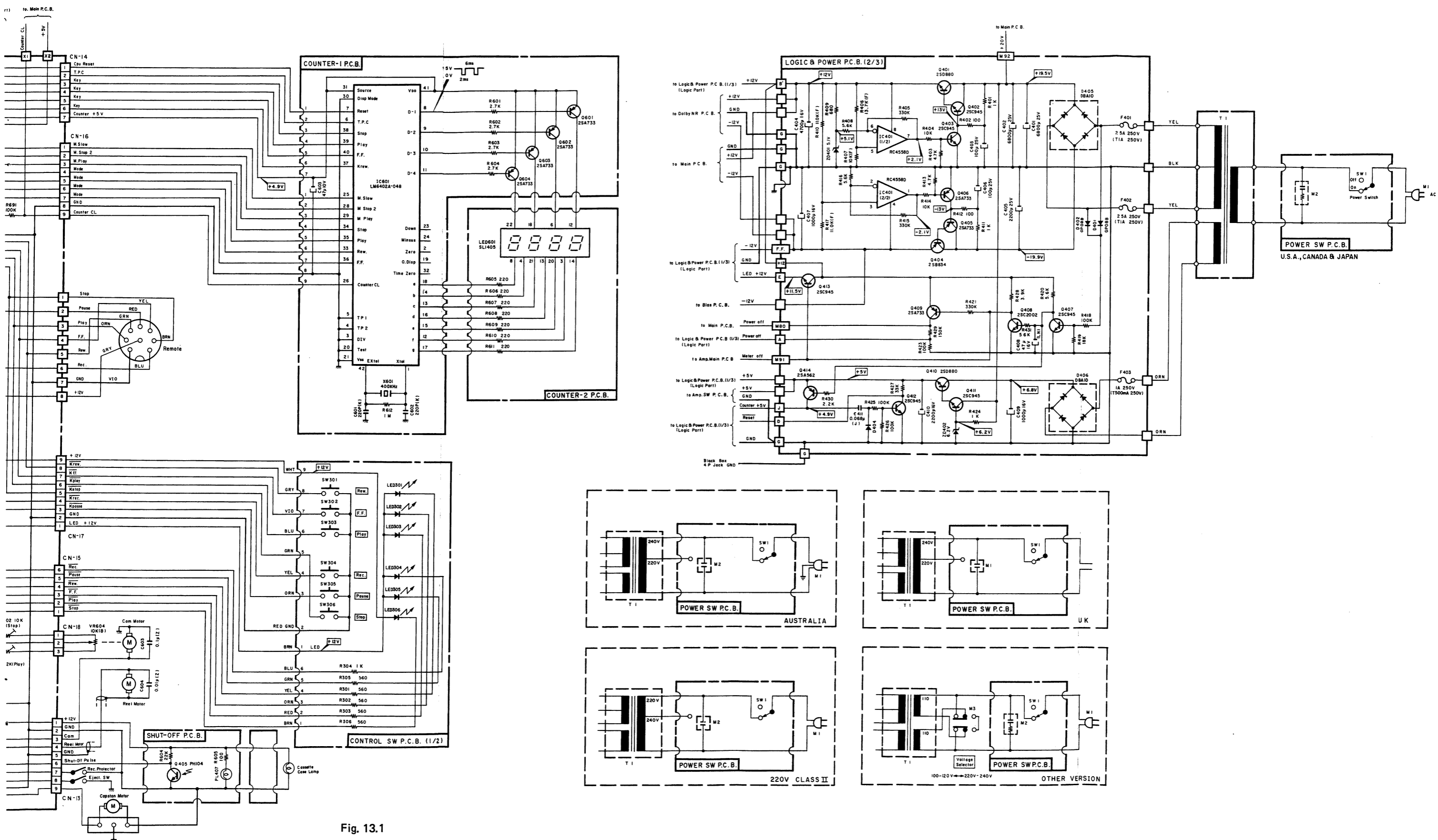
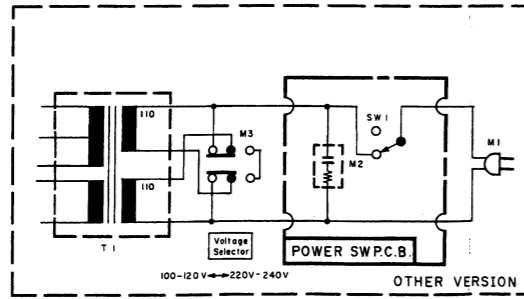
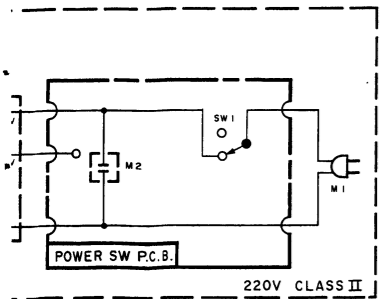
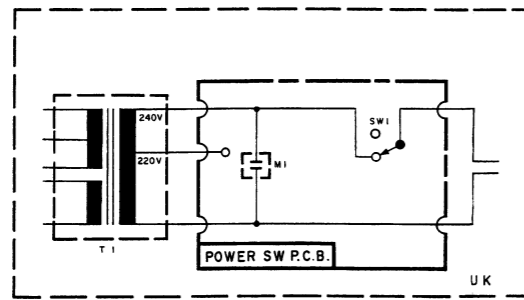
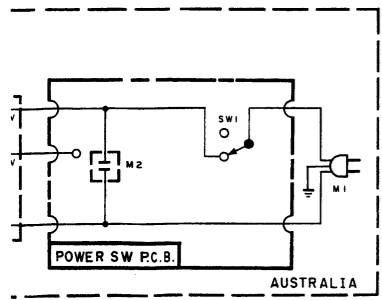
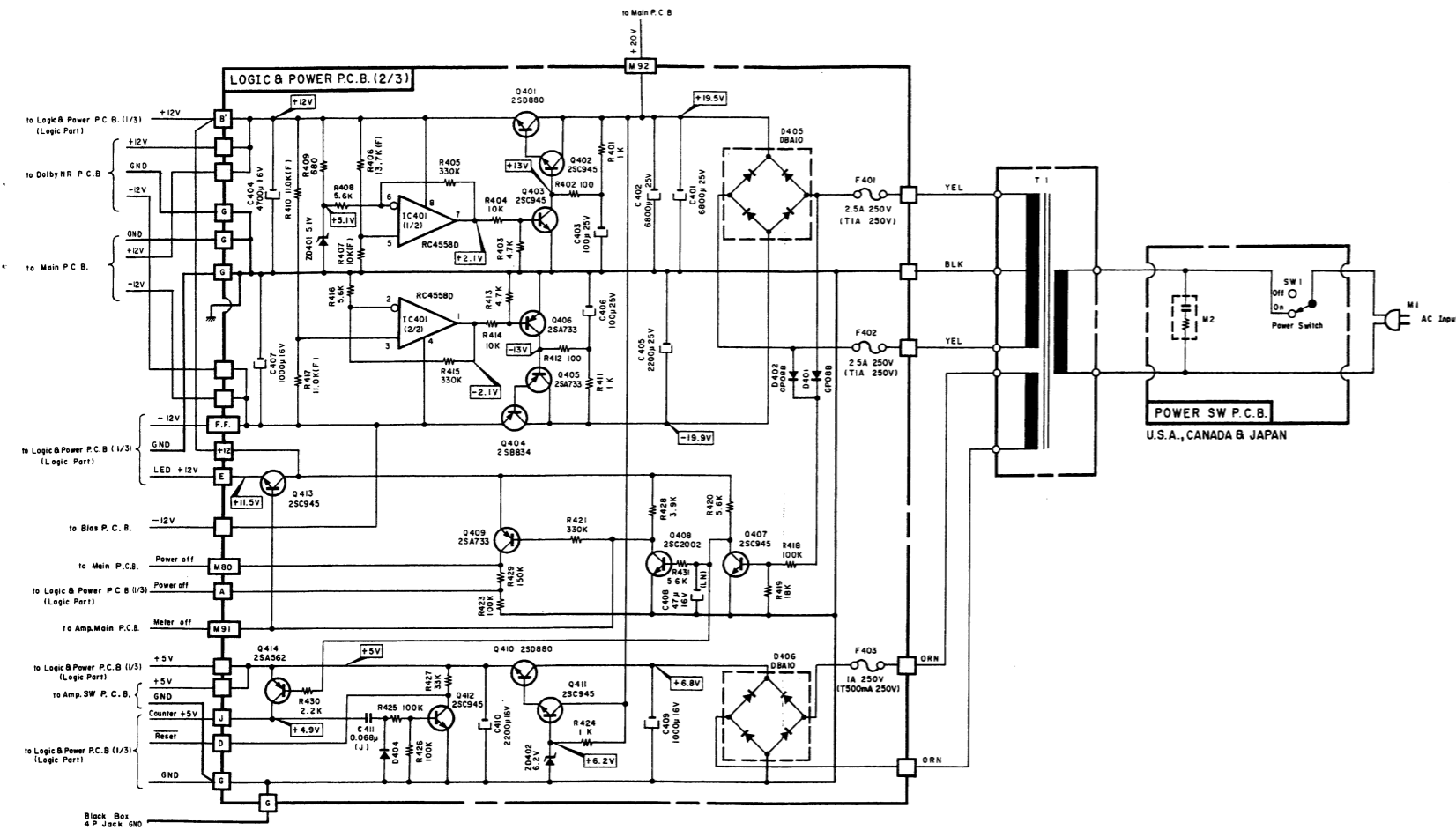


Fig. 13.1

- Notes.: 1. Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.  
 2. Resistor and capacitor marked with \* show typical value.



13.2. Amplifier Section  
 13.2.1. Amplifier Section  
 (U.S.A. & Canada)

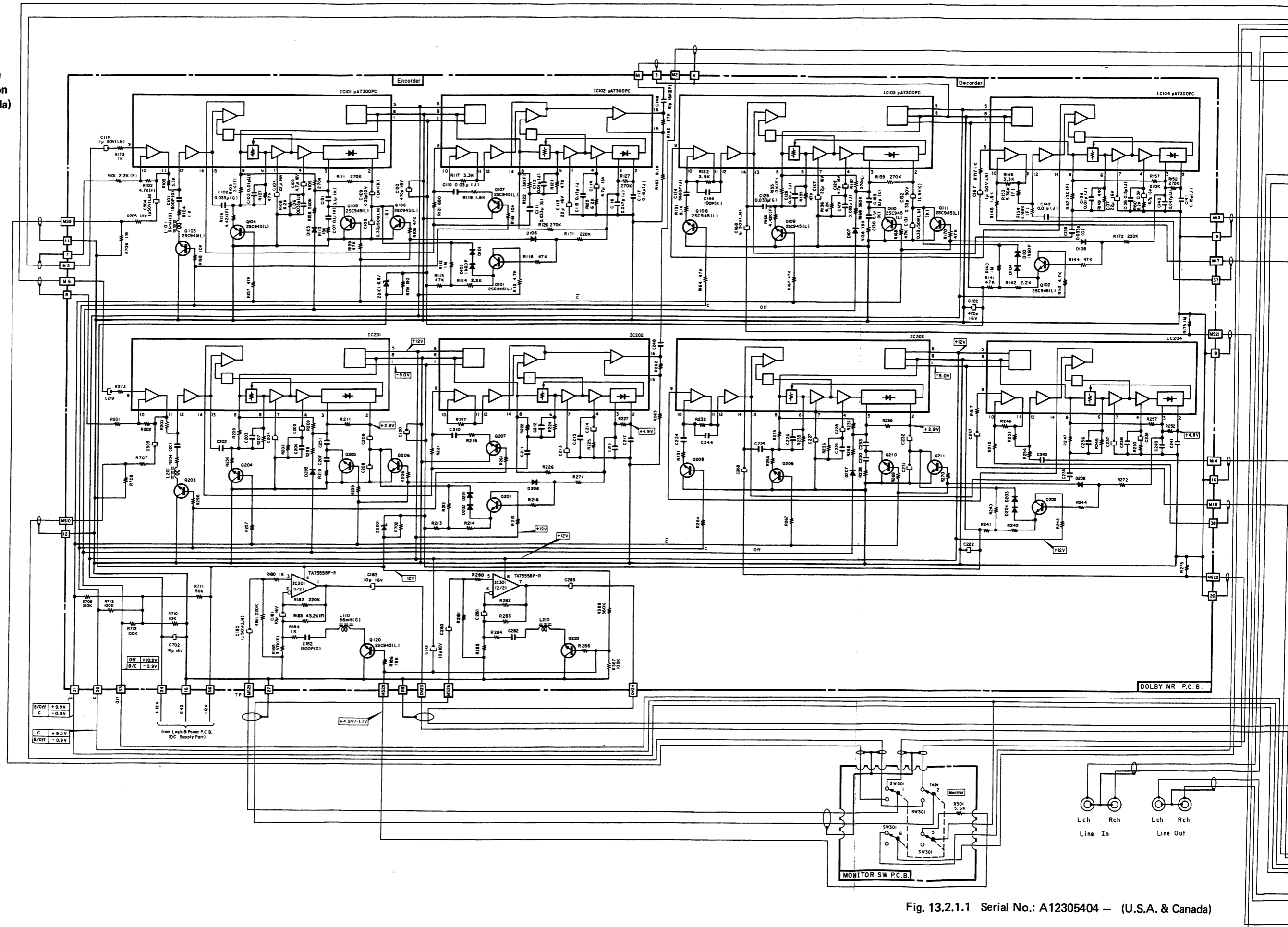


Fig. 13.2.1.1 Serial No.: A12305404 - (U.S.A. & Canada)

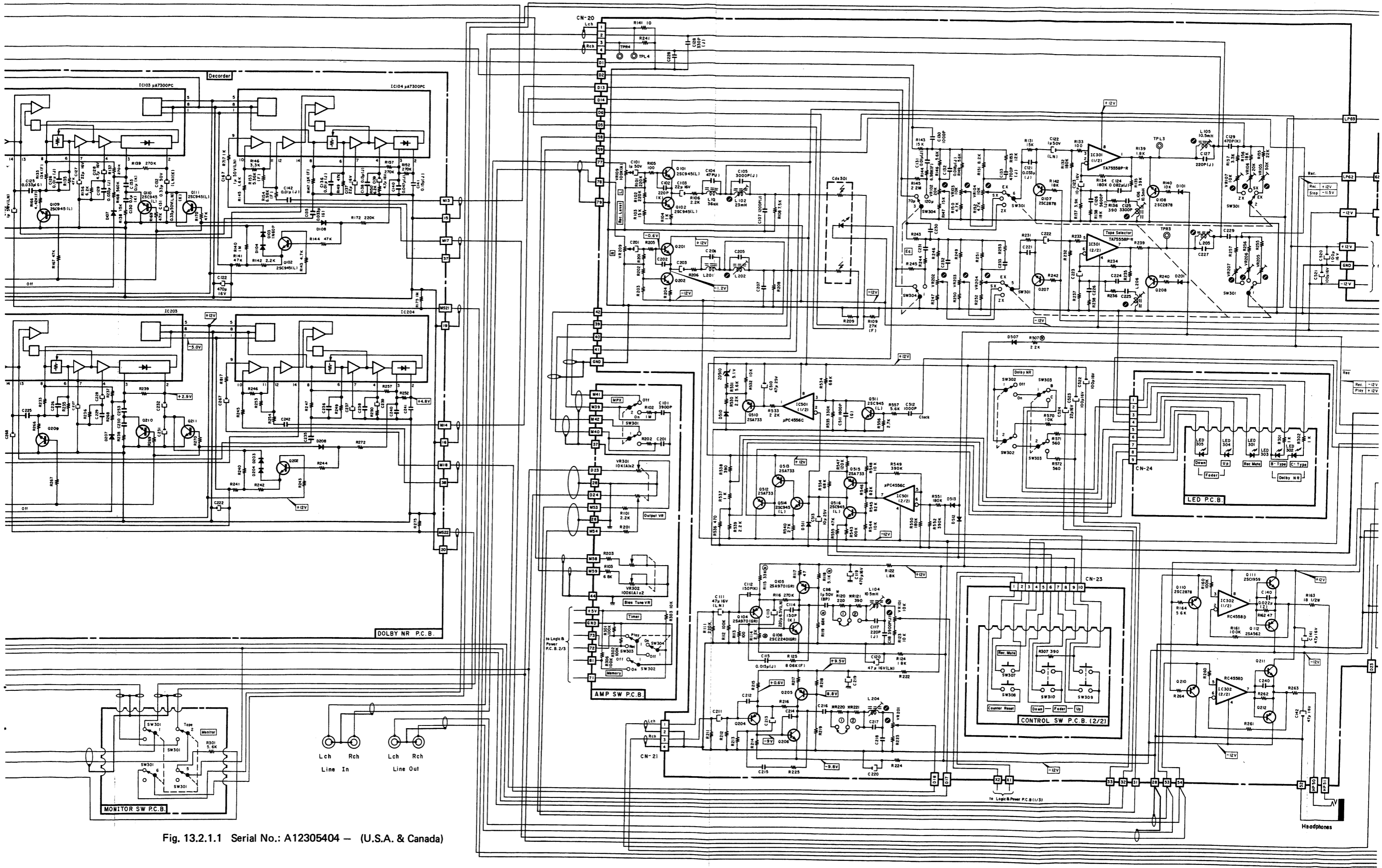
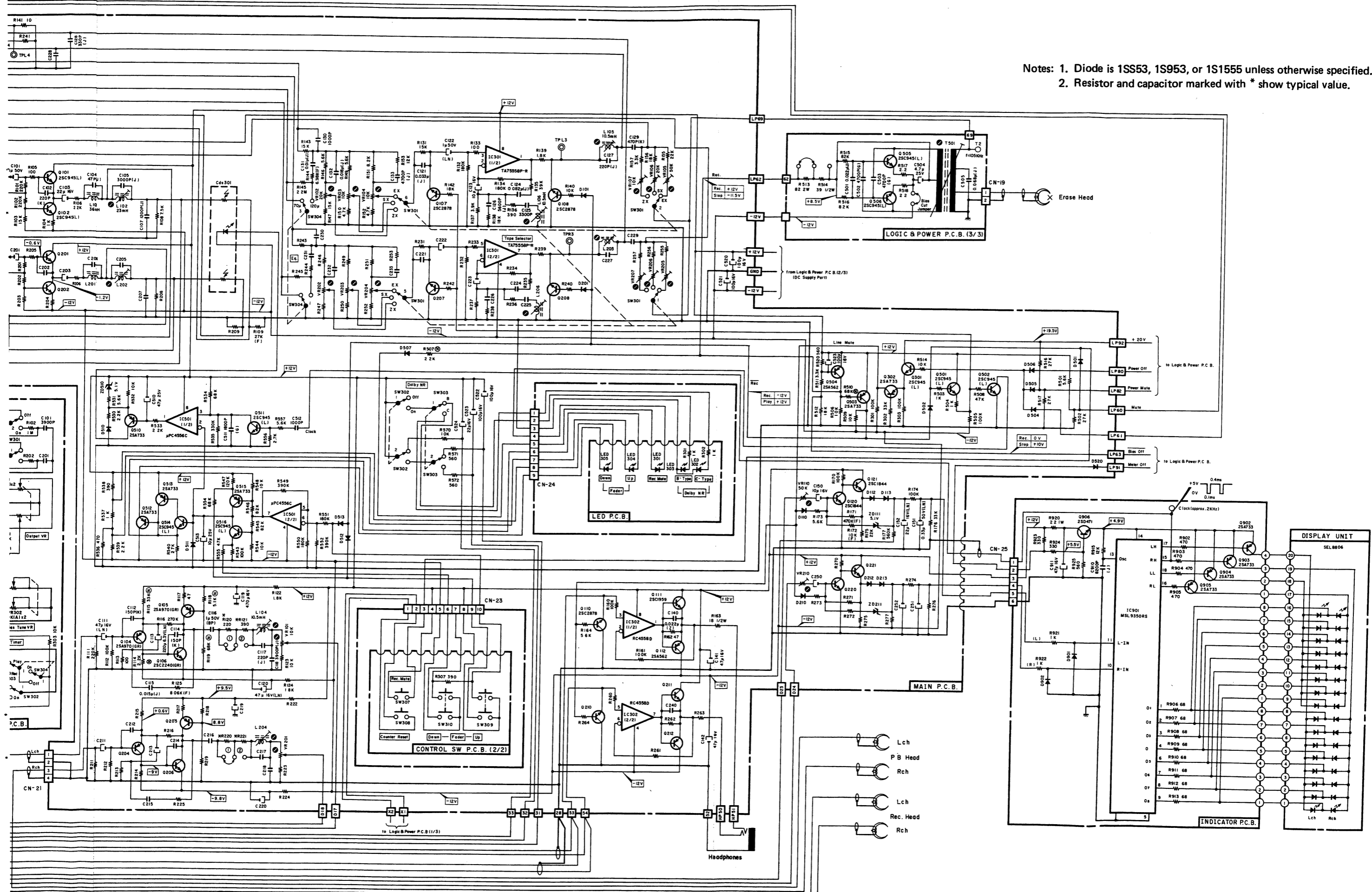


Fig. 13.2.1.1 Serial No.: A12305404 - (U.S.A. & Canada)



Notes: 1. Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.  
 2. Resistor and capacitor marked with \* show typical value.



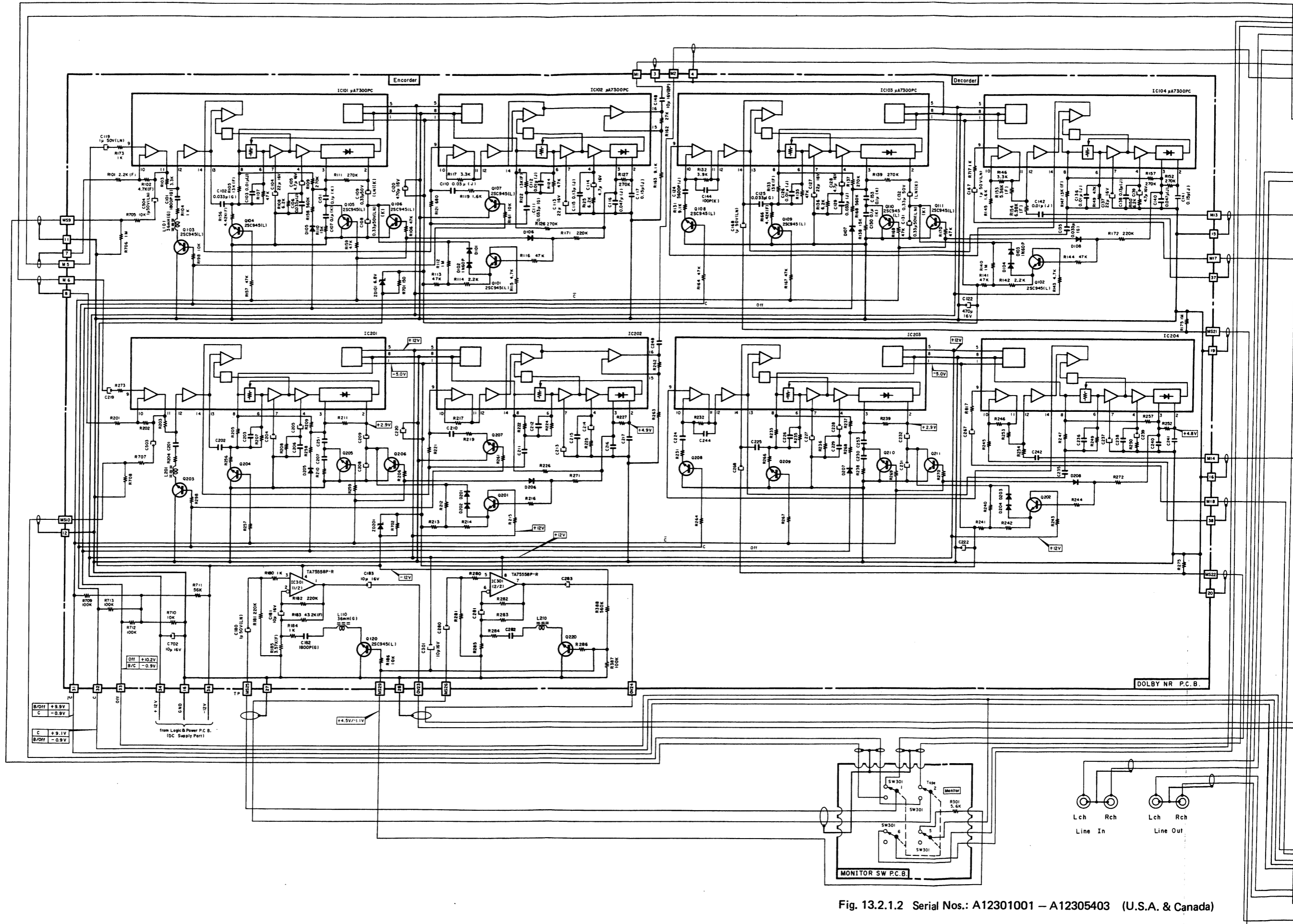


Fig. 13.2.1.2 Serial Nos.: A12301001 – A12305403 (U.S.A. & Canada)

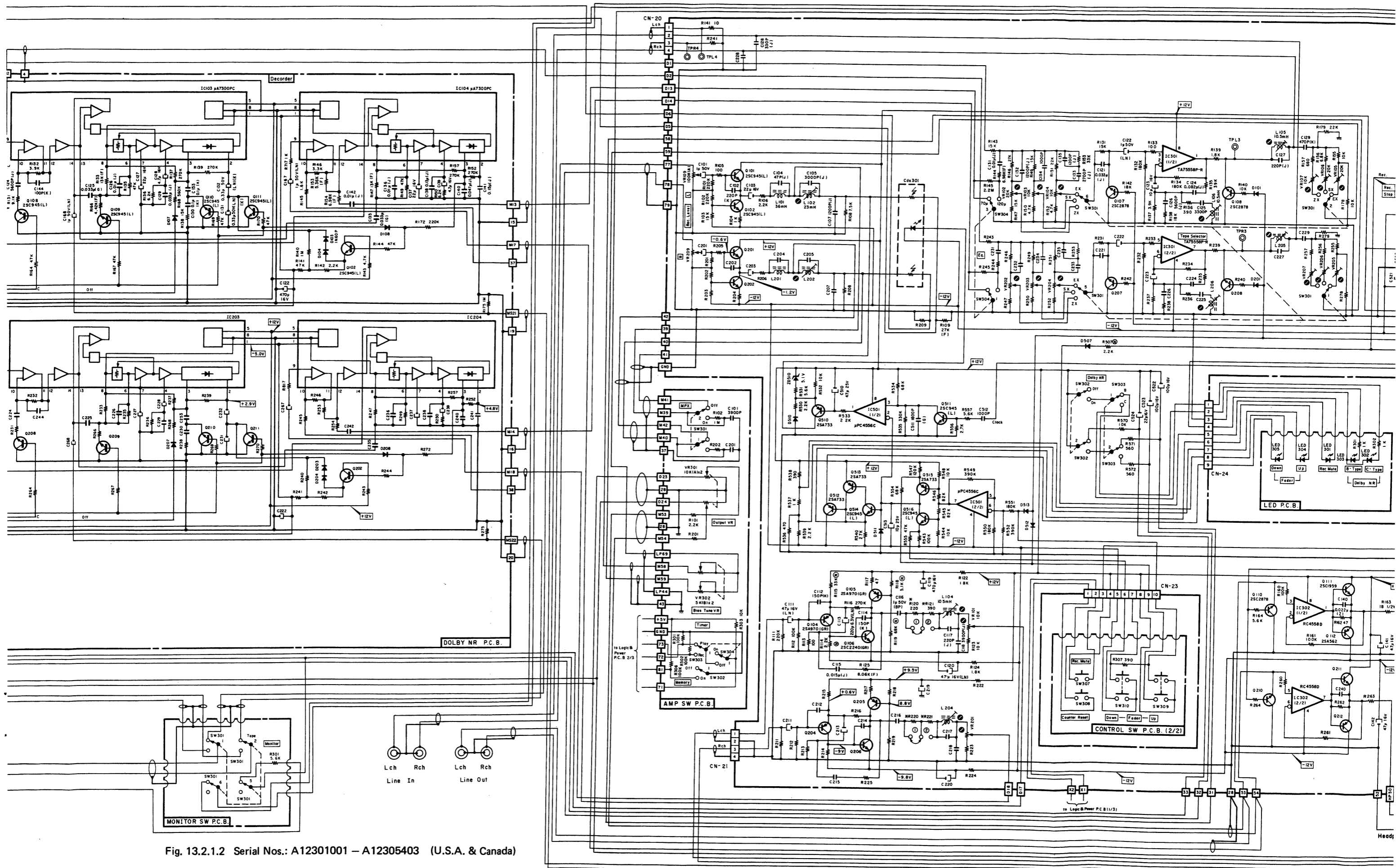
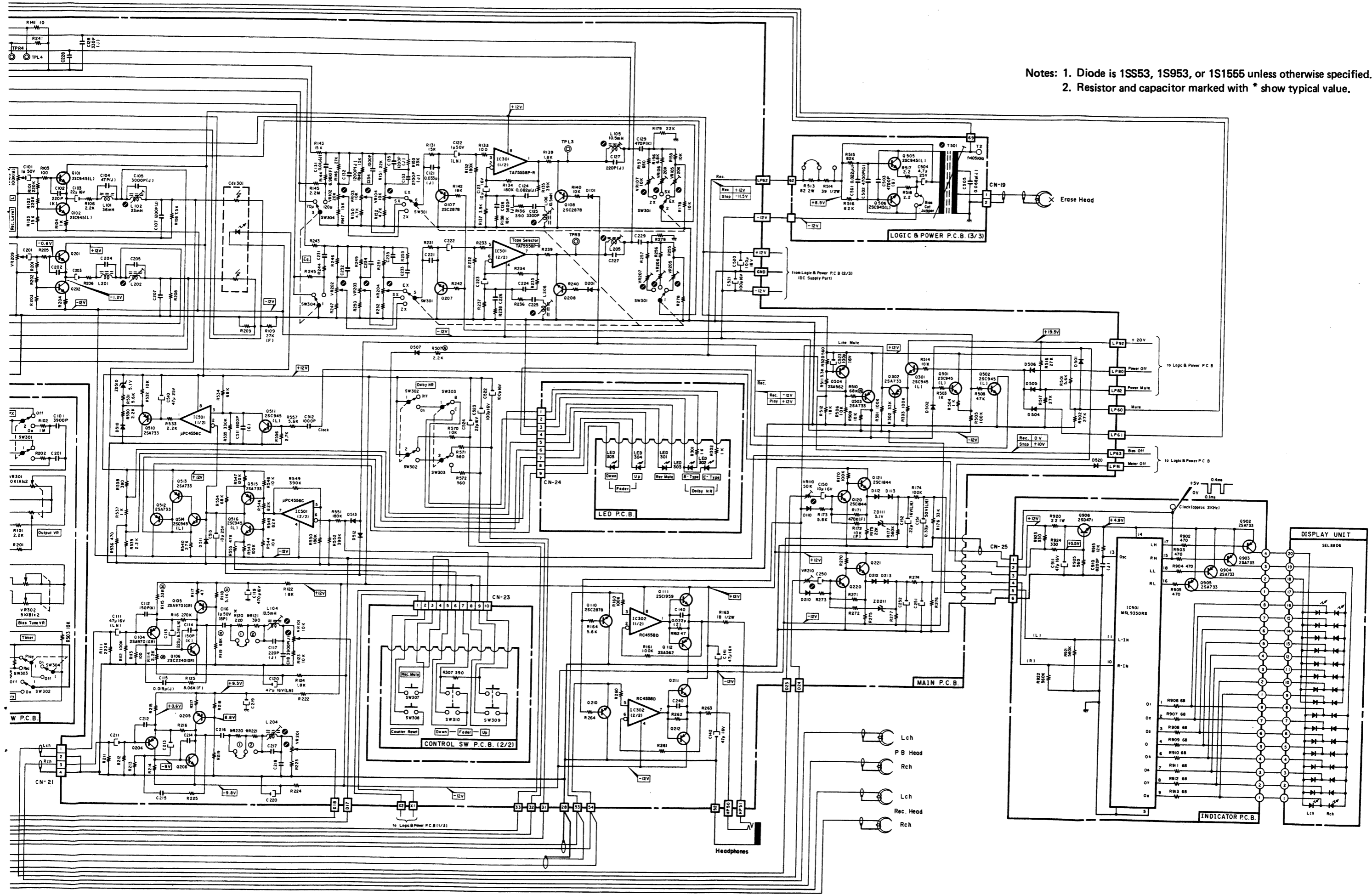


Fig. 13.2.1.2 Serial Nos.: A12301001 – A12305403 (U.S.A. & Canada)

- Notes: 1. Diode is 1SS53, 1S953, or 1S1555 unless otherwise specified.  
 2. Resistor and capacitor marked with \* show typical value.



13.2.2. Amplifier Section  
(UK, Australia,  
220V Class 2,  
Others & Japan)

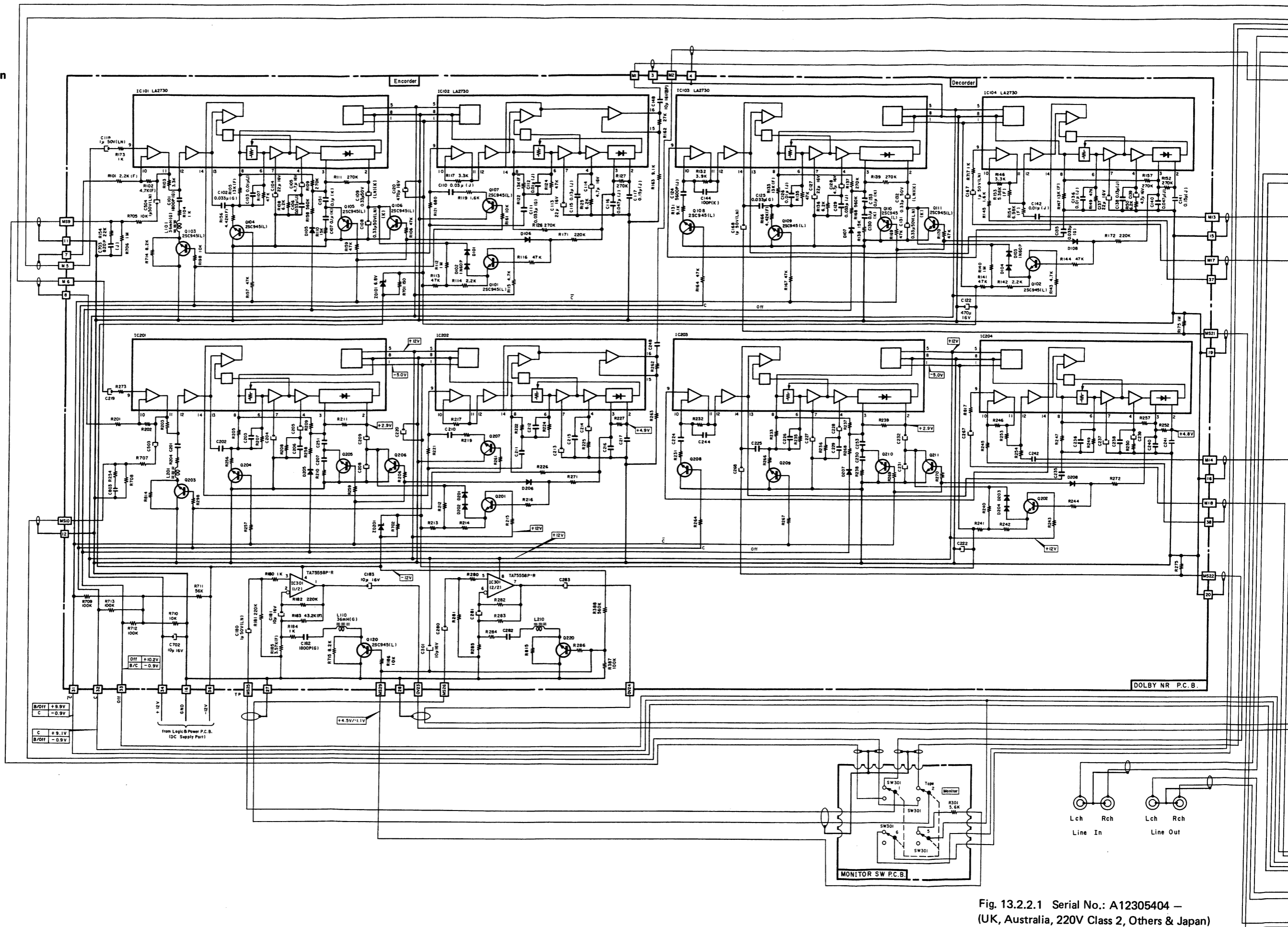


Fig. 13.2.2.1 Serial No.: A12305404 –  
(UK, Australia, 220V Class 2, Others & Japan)

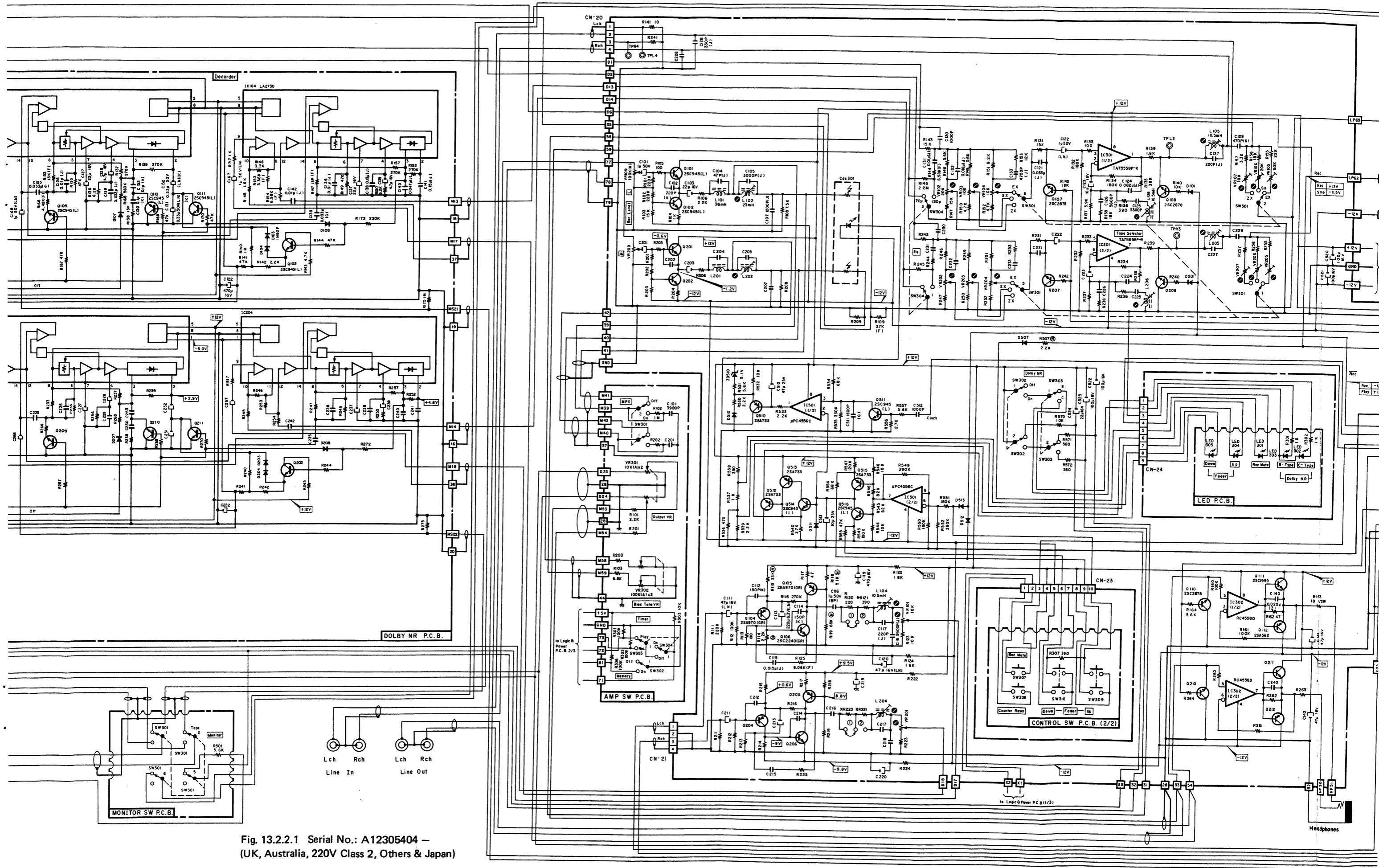
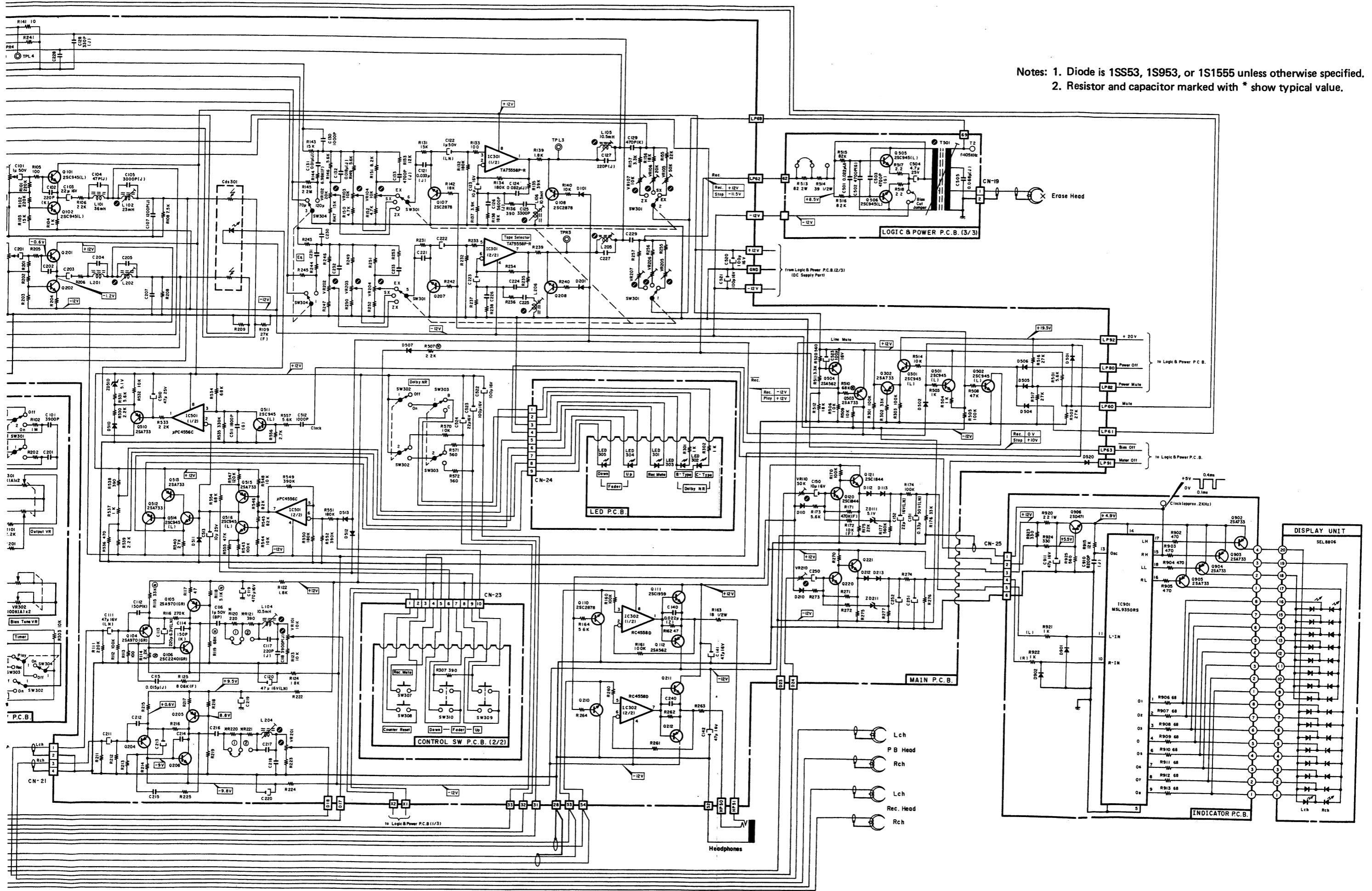


Fig. 13.2.2.1 Serial No.: A12305404 –  
(UK, Australia, 220V Class 2, Others & Japan)

- Notes: 1. Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.  
 2. Resistor and capacitor marked with \* show typical value.



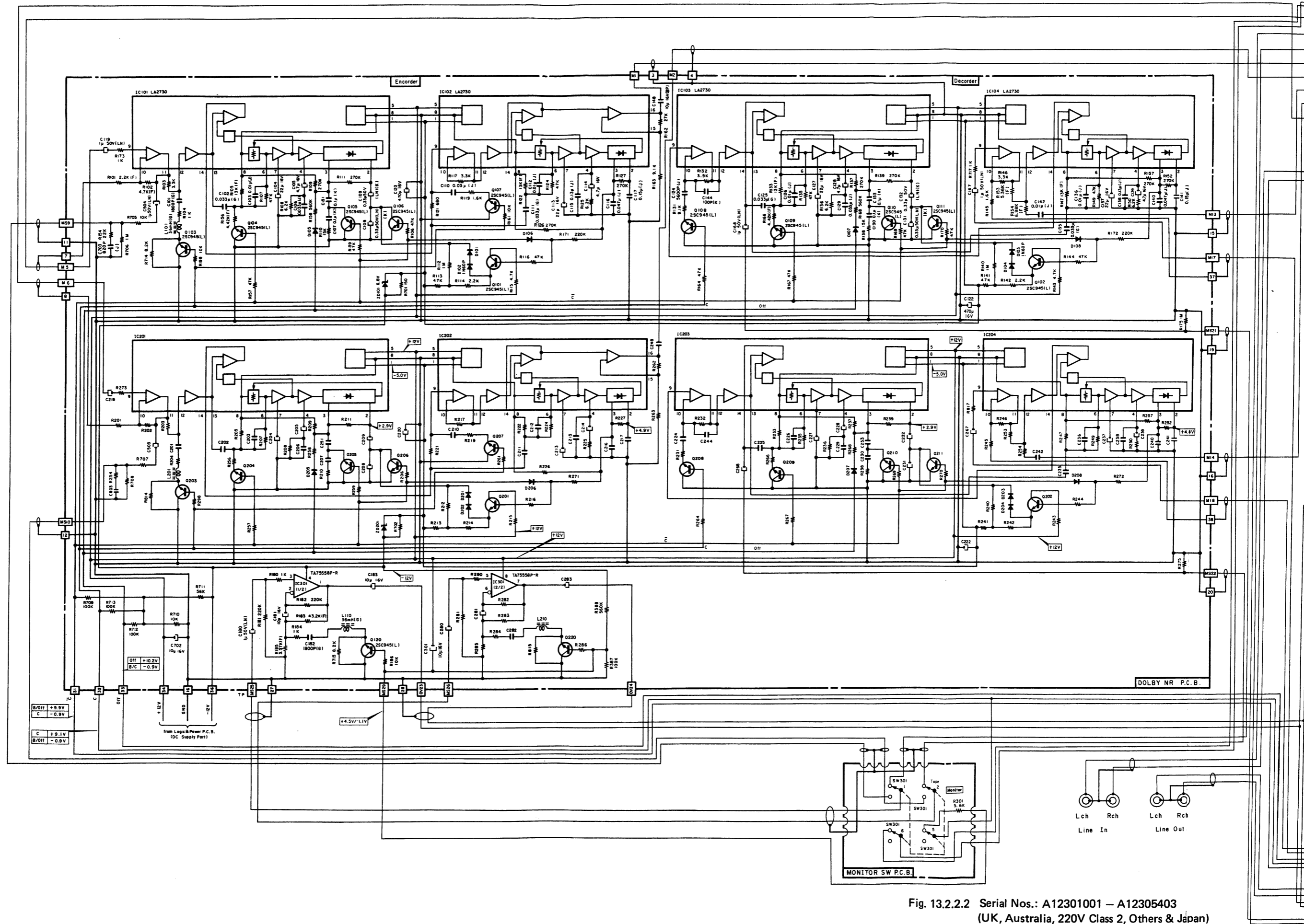


Fig. 13.2.2 Serial Nos.: A12301001 – A12305403  
(UK, Australia, 220V Class 2, Others & Japan)

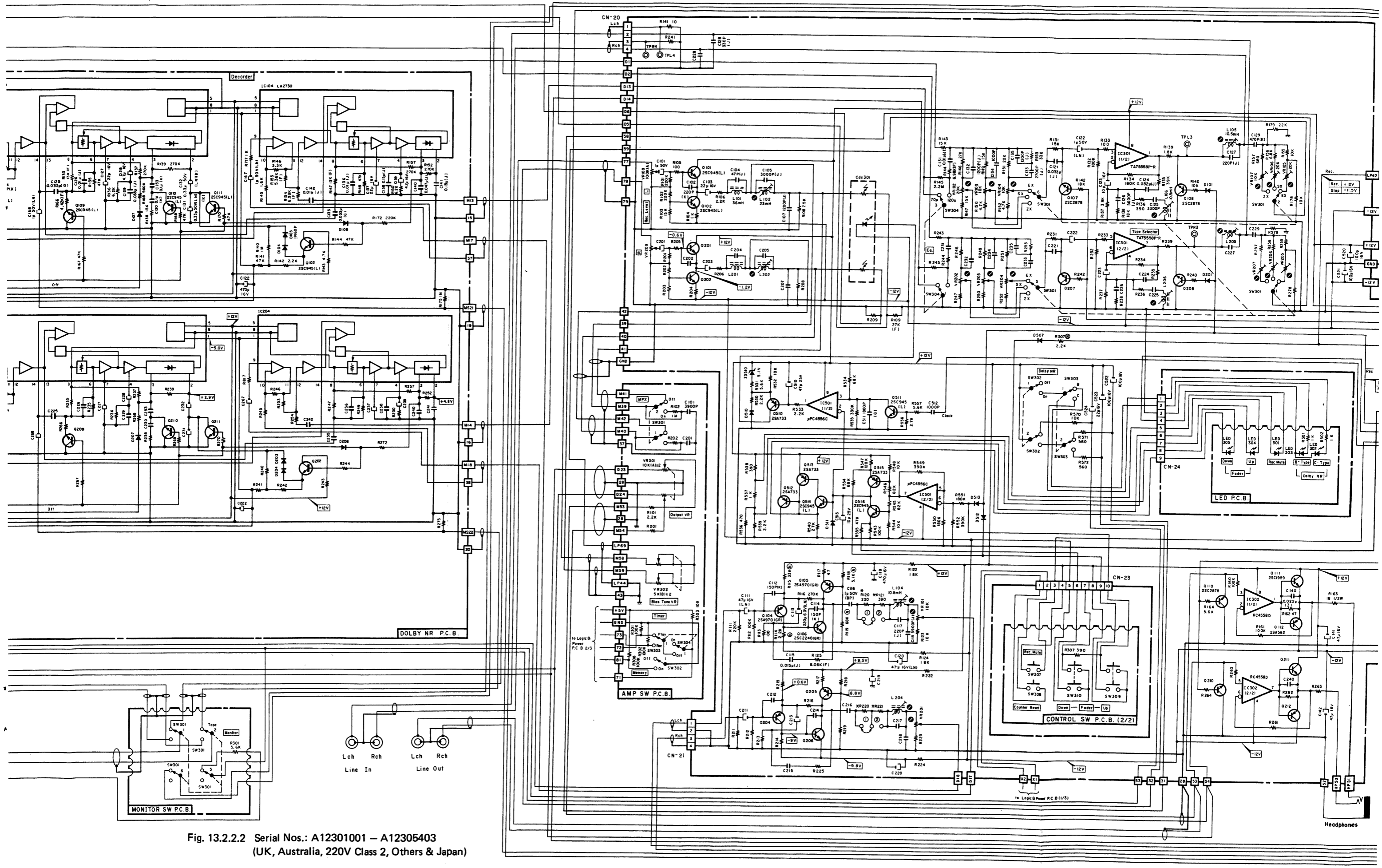
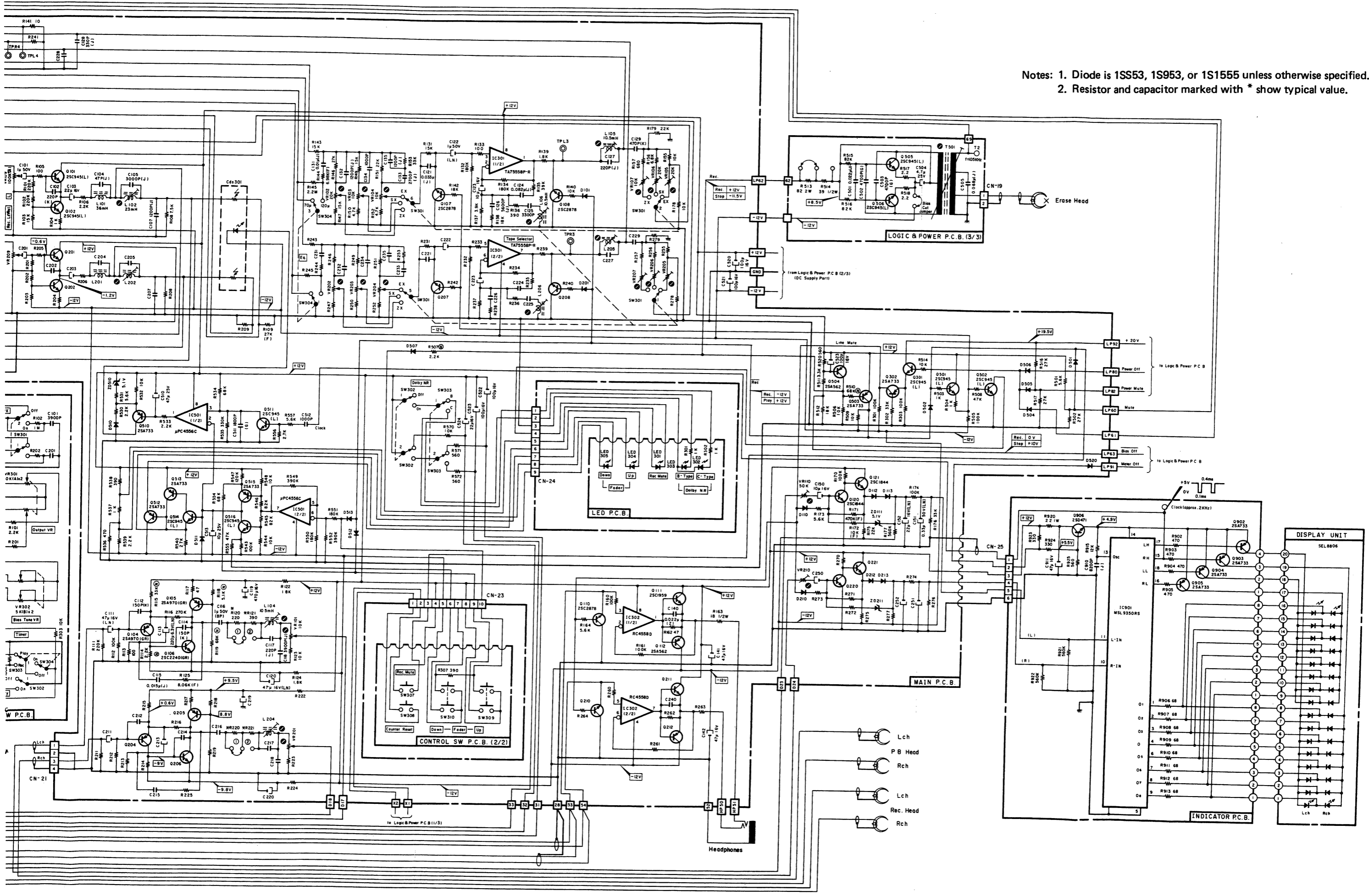


Fig. 13.2.2.2 Serial Nos.: A12301001 – A12305403  
(UK, Australia, 220V Class 2, Others & Japan)



Notes: 1. Diode is 1S553, 1S953, or 1S1555 unless otherwise specified.  
 2. Resistor and capacitor marked with \* show typical value.



**13.3. Attention to Servicemen**

**(1) Parts Replacement**

Following parts shall be replaced with the specified ones. Refer to the parts list.

- (a) Power Supply Circuit  
Power Cord  
Power Transformer: T1

- (b) Power Switch P.C.B. Ass'y  
Power Switch: SW1  
Spark Killer

- (c) Logic & Power P.C.B. Ass'y  
Fuses: F401, 402, 403  
Power Transistors: Q401, 404, 408, 410, 414, 607, 608, 610, 611, 621  
Diode Bridges: D405, 406  
Fail Safe Type Resistors: R513, 514, 517, 518, 641, 669

- (d) Main P.C.B. Ass'y  
Power Transistors: Q111, 112, 211, 212, 504  
Fail Safe Type Resistors: R163, 263

- (e) Dolby NR P.C.B. Ass'y  
Fail Safe Type Resistors: R701, 702

- (f) Shut-off P.C.B. Ass'y  
Fail Safe Type Resistor: R605

- (g) Indicator P.C.B. Ass'y  
Power Transistor: Q906  
Fail Safe Type Resistor: R920

**(2) Insulation Check**

Before returning the repaired LX-5 to a customer, check to insure that the exposed part is accurately insulated from the AC line by measuring the leakage current or the insulation resistance between them.

**13.4. IC Block Diagrams**

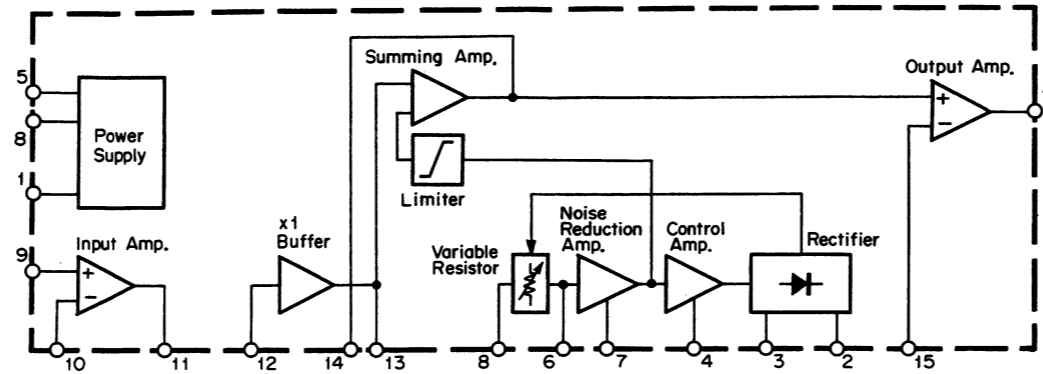


Fig. 13.3 Dolby NR IC  $\mu$ A7300PC, LA2730

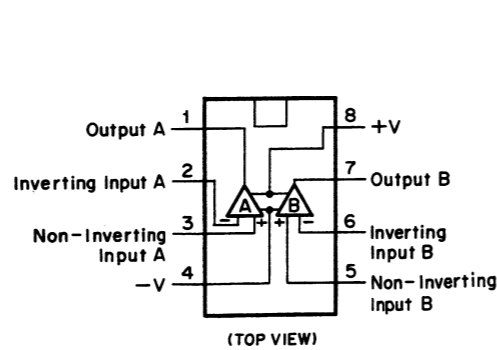


Fig. 13.4 Operational Amp. IC RC4558D,  $\mu$ PC4556C, TA7558P-R

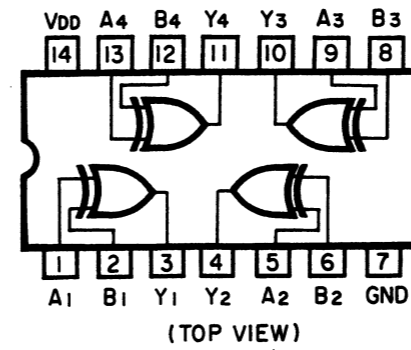


Fig. 13.5 Exclusive OR Gate C-MOS IC  $\mu$ PD4030BC

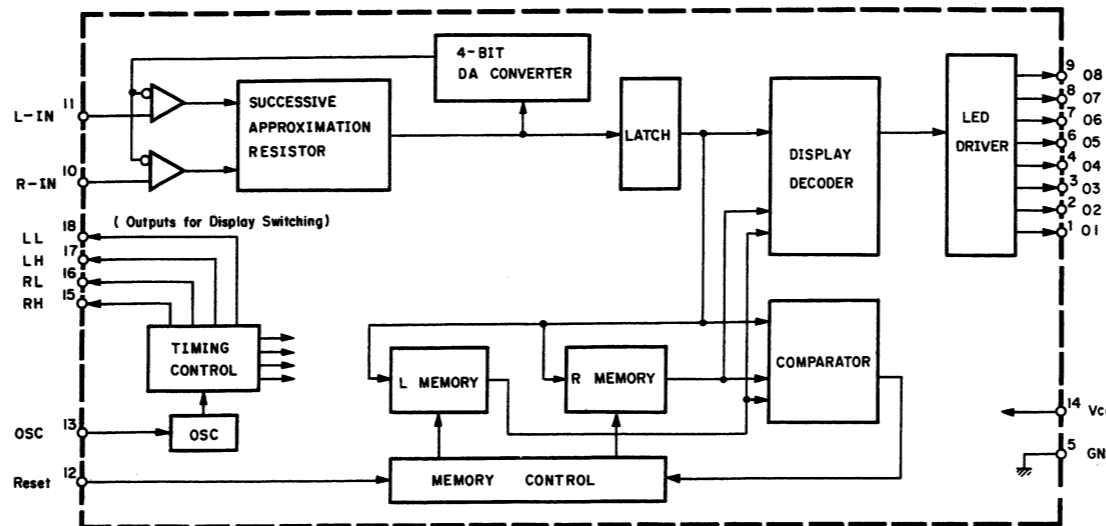


Fig. 13.6 Level Meter Control IC MSL9350RS

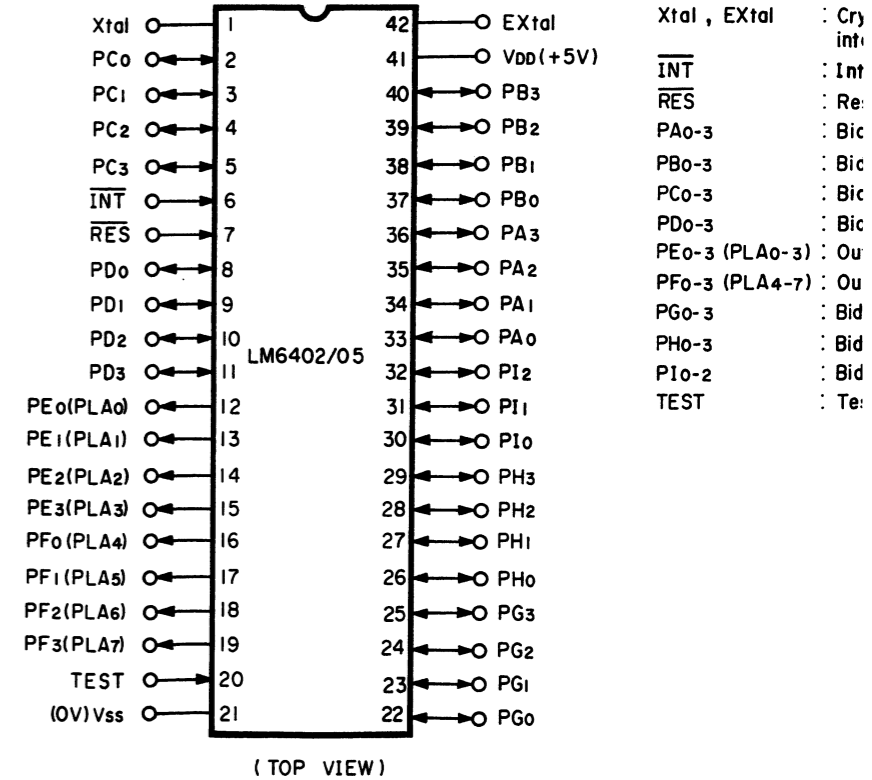
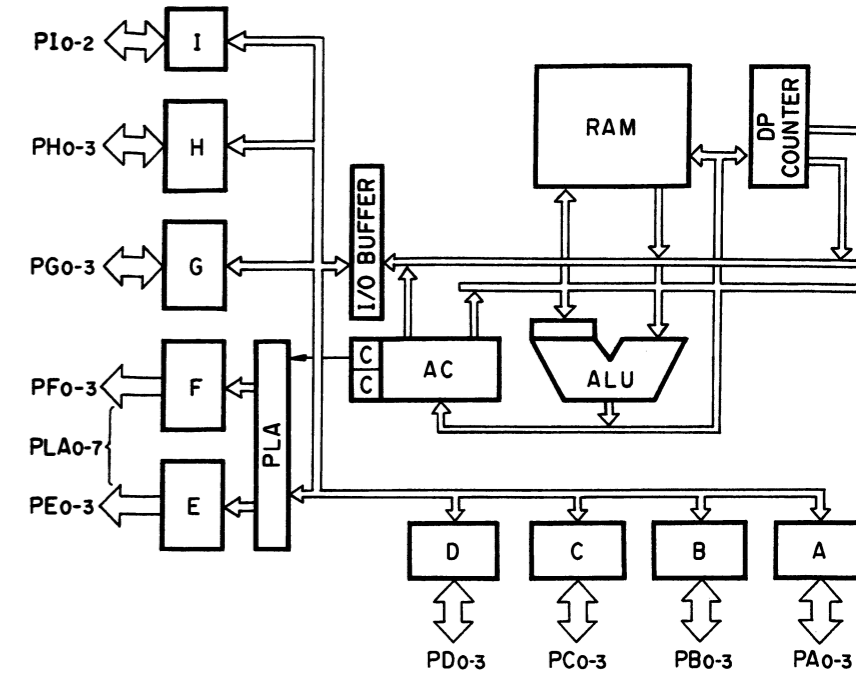
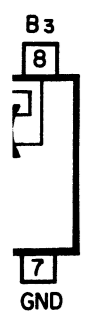
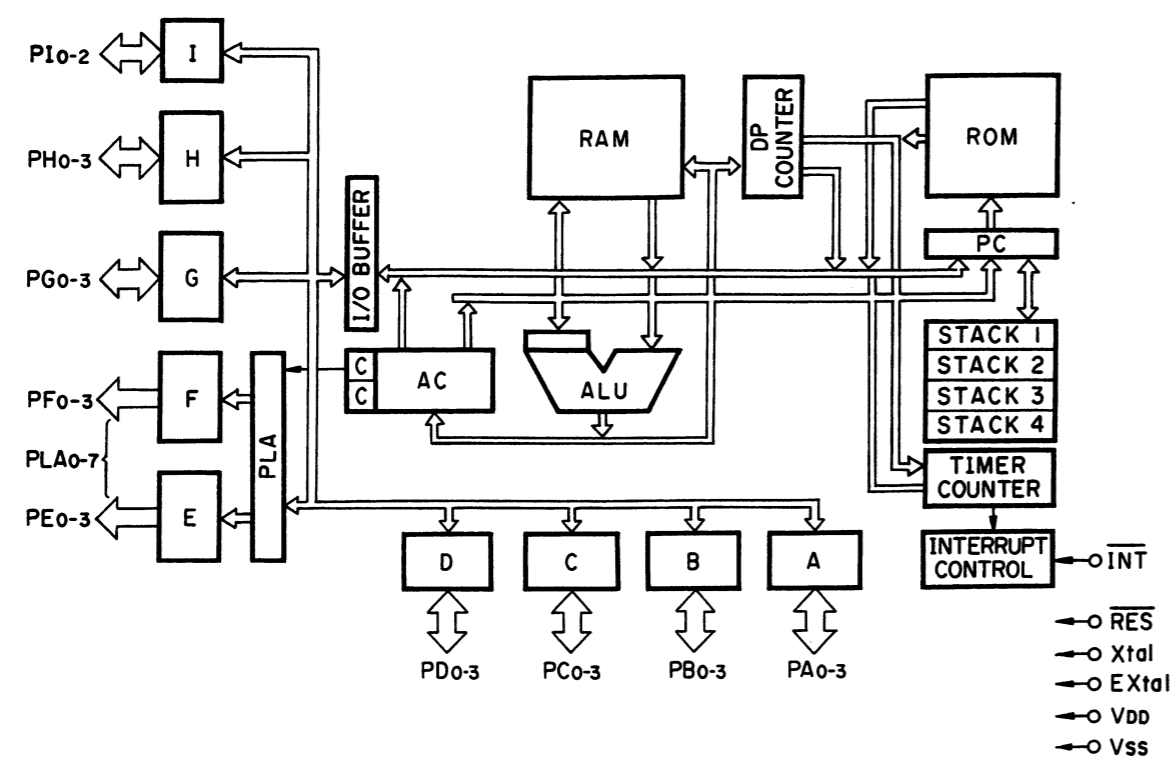
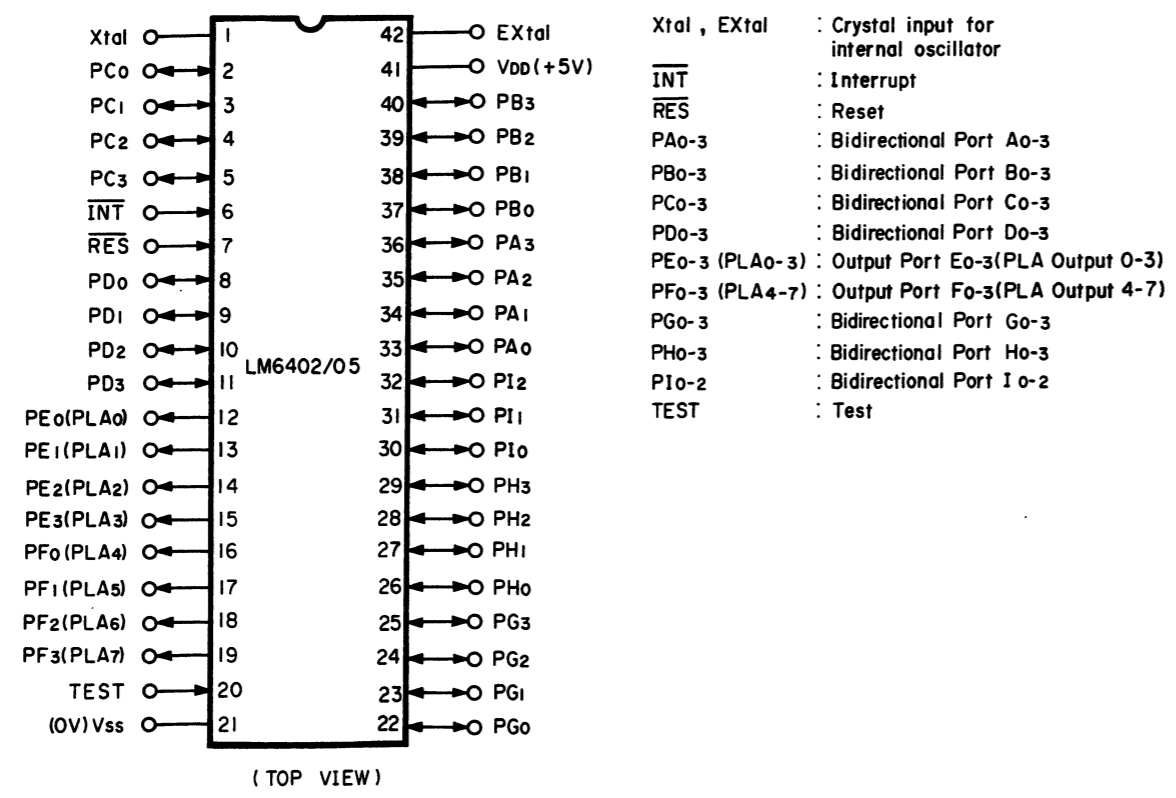
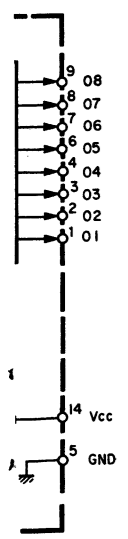


Fig. 13.7 4-Bit Micro-processor LM6402A-052/048



C μPD4030BC



- Xtal , EXtal : Crystal input for internal oscillator
- INT : Interrupt
- RES : Reset
- PA0-3 : Bidirectional Port A0-3
- PB0-3 : Bidirectional Port B0-3
- PC0-3 : Bidirectional Port C0-3
- PD0-3 : Bidirectional Port D0-3
- PE0-3 (PLA0-3) : Output Port E0-3(PLA Output 0-3)
- PF0-3 (PLA4-7) : Output Port F0-3(PLA Output 4-7)
- PG0-3 : Bidirectional Port G0-3
- PH0-3 : Bidirectional Port H0-3
- PIO-2 : Bidirectional Port I 0-2
- TEST : Test

(TOP VIEW)

Fig. 13.7 4-Bit Micro-processor LM6402A-052/048

Track C  
Heads  
Motors  
Power S  
Power C  
Tape Sp  
Wow an  
Frequen  
Signal to  
Total Ha  
Erasure  
Separati  
Crosstall  
Bias Fre  
Input (L  
Output (L  
Dimensi  
Approxi  
● Specifi  
● Dolby  
● The w

INT  
 RES  
 Xtal  
 EXtal  
 VDD  
 VSS

ut 0-3)  
 ut 4-7)

#### 14. SPECIFICATIONS

Track Configuration	4 Tracks/2-Channel Stereo
Heads	3 (Erase Head x 1, Record Head x 1, Playback Head x 1)
Motors (Tape Transport)	DC Servo Motor (Capstan Drive) x 1 DC Motor (Reel Drive) x 1
Power Source	100, 120, 120/220-240, 220 or 240 V AC; 50/60 Hz (According to country of sale)
Power Consumption	33 W max.
Tape Speed	1-7/8 ips (4.8 cm/sec) ±0.5%
Wow and Flutter	Less than 0.11% Wtd peak Less than 0.06% Wtd rms
Frequency Response	20 Hz–20,000 Hz (recording level –20 dB, ZX, SX, EXII Tape)
Signal to Noise Ratio	Dolby C-Type NR on <70 μs, ZX Tape> Better than 70 dB (400 Hz, 3% THD, IHF A-Wtd rms) Dolby B-Type NR on <70 μs, ZX Tape> Better than 64 dB (400 Hz, 3% THD, IHF A-Wtd rms)
Total Harmonic Distortion	Less than 0.9% (400 Hz, 0 dB, ZX Tape) Less than 1.0% (400 Hz, 0 dB, SX, EXII Tape)
Erasure	Better than 60 dB (100 Hz, 0 dB)
Separation	Better than 36 dB (1 kHz, 0 dB)
Crosstalk	Better than 60 dB (1 kHz, 0 dB)
Bias Frequency	105 kHz
Input (Line)	50 mV, 70 k ohms
Output (Line)	1 V (400 Hz, 0 dB, Output Level Control at max.), 2.2 k ohms
(Headphones)	12 mW (400 Hz, 0 dB, Output Level Control at max.), 8-ohm load
Dimensions	450 (W) x 135 (H) x 307 (D) millimeters 17-3/4 (W) x 5-5/16 (H) x 12-1/16 (D) inches
Approximate Weight	8.5 kg 18 lb. 12 oz

- Specifications and appearance design are subject to change for further improvement without notice.
- Dolby NR under license from Dolby Laboratories Licensing Corporation.
- The word "DOLBY" and the Double-D-Symbol are trademarks of Dolby Laboratories Licensing Corporation.