

**SERVICE
MANUAL**


SD-35 / SD-45II

4822 725 50791


marantz®

model **SD-35/SD-45II**

Stereo Cassette Deck

MARANTZ DESIGN AND SERVICE

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3. Description of parts
4. Model number for which part is required
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Parts may be ordered at the following addresses:

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A 1101 Wien
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PTY., Ltd.
19 Chard Road
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Telex: 24121

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Telex: 24466

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MARANTZ
DIVISION OF PHILIPS S.A.
AV. Santa Maria, 0760
Casilla 2687
Santiago
Telex: 240.239

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SERVICE A/S
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Postbox 1919
DK-2300 København S
Denmark
Telex: 31201

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Kaivokatu 8
00100 Helsinki
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Telex: 124811

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92600 Asnières
France
Telex: 611651

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Hippocrates Street 188
Athens 11471
Greece
Telex: 216.795

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35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
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Ussama Building
Fahd al Saleem Street
P.O.Box 23781
Safat-Kuwait
Telex: 22694

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Via Chiese, 74
20126 Milano
Italy

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P.O.Box 5954
University Street
Riyadh 11432
Saudi Arabia
Telex: 201530

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MARANTZ
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Rainer House
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Johannesburg
Telex: 483.456

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PHONO S.A.
Ignacio Iglesias 10
Badalona (Barcelona)
Spain
Telex: 59355

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DIVISION OF PHILIPS
Försäljning AB
Tegeluddsvägen 1
S-115 84 Stockholm
Sweden
Telex: 14060

SWITZERLAND
DYNAVOX ELECTRONICS
Route de Villars 105
1701 Fribourg
Switzerland
Telex: 942377

TURKEY
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I.M.C.
6 Blok N°6310
Unkapani
Istanbul
Turkey
Telex: 22085

MALTA
CACHIA & GALEA
Republic Street, 68D
Valetta
Telex: 1682

U.S.A.
MARANTZ COMPANY, Inc.
National Service Department
P.O.Box 577
Chatsworth, CA 91311
U.S.A.

TECHNICAL ASSISTANCE

Should you require any other technical support, do not hesitate to contact the Technical Department of P.M.A. MARANTZ INTERNATIONAL
Quality & Service Dept.
80, Rue des Deux Gares,
B-1070 Brussels
Belgium
Phone: 02/525.70.22 or 525.70.23
Telefax: 02/525.6160
Telex: 23550 OR
61511 (PHEMB) routing: BELDMZT

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

TABLE OF CONTENTS

Section	Page
1. P.W. BOARDS	3
2. TEST EQUIPMENT REQUIRED FOR SERVICING	4
3. OPERATIONAL DESCRIPTION OF MICROPROCESSOR ITS PERIPHERAL CIRCUITS	4
4. OPERATIONAL DESCRIPTION OF AUDIO AND PERIPHERAL CIRCUITS	5
5. MECHANISM OPERATIONAL DESCRIPTION	7
6. DISASSEMBLY	8
7. ELECTRICAL ADJUSTMENTS	9
8. VOLTAGE CONVERSION	12
9. BLOCK AND LEVEL DIAGRAM	13
10. WIRING DIAGRAM	
Model SD-45II	14
Model SD-35	16
11. PARTS LOCATION	
Model SD-45II	18
Model SD-35	21
12. EXPLODED VIEWS AND PARTS LIST	24
13. ELECTRICAL PARTS LIST	34
14. TECHNICAL SPECIFICATION	38

How to use this service manual

- The "Common parts" which Marantz Japan, Inc. has established are eliminated from this service manual.
- These "Common parts" are applied to all models in the service manuals arranged and issued by MJJ.
- To indicate clearly the common parts in the schematic diagram, a line is drawn above or under the Ref. Desig. No. of applicable parts.
- "Common parts" can be supplied from the Marantz service center as ever.
In case of ordering, please establish the parts number of 12 N/C'S following the procedure mentioned in this service manual "How to establish the parts number for common parts".

NOTE:

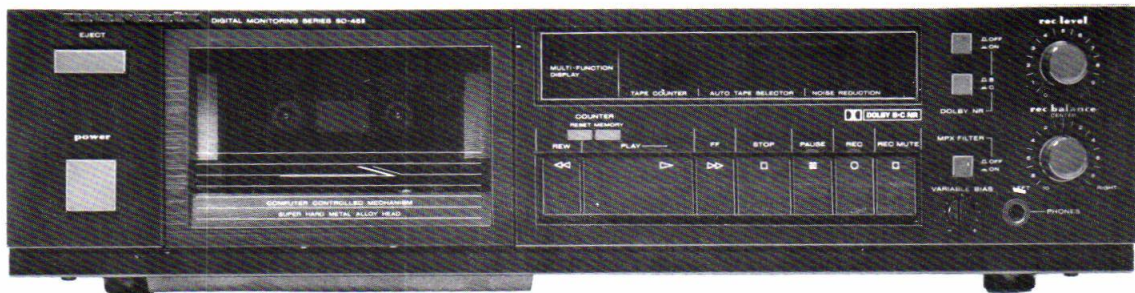
When you order parts to the Marantz parts center, please take notice of the following points.

1. Please correctly write the parts number of 12 N/C'S following the rule.
2. Since ordering parts by the Ref. Design. No. or ratings indicated in the schematic diagram does not satisfy the above conditions, the Marantz parts supply system dose not work properly.
As this case is apt to cause a trouble, please pay attention to it.

MODEL SD-35 STEREO CASSETTE DECK



MODEL SD-45II STEREO CASSETTE DECK



1. P.W. BOARDS

As can be seen from the circuit diagram, the chassis of your Cassette Deck consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Audio Main mounted on P.W. Board PJ03
2. NR Switch/
MPX Switch mounted on P.W. Board PJ33
3. Rec Volume mounted on P.W. Board PJ43
4. Headphone Jack mounted on P.W. Board PG03
5. Logic Switch/LED
indicator mounted on P.W. Board PS03
6. Power Supply/Logic
Main mounted on P.W. Board PU03
7. FL Meter/Counter
Driver mounted on P.W. Board PX03
8. FL Meter mounted on P.W. Board PX13
9. Power Switch mounted on P.W. Board P833
10. Power Transf.
Connector mounted on P.W. Board P883
11. Power Transf. Cover mounted on P.W. Board P893

2. TEST EQUIPMENT REQUIRED FOR SERVICING

For measuring or checking your Cassette Deck, the following instruments and materials are necessary.

- VTVM
- Audio Oscillator (AF OSC)
- Attenuator (600 Ω)
- Oscilloscope
- Bandpass Filter (1 kHz)
- IEC A-Curve Filter
- Wow and Flutter Meter
- Torque Meter (Cassette Type)
- Digital Frequency Counter
- Distortion Meter
- Blank Tapes (Completely erased with bulk eraser)
 - TDK AC-212 (Normal)
 - TDK AC-512 (CrO₂)
 - TDK AC-712 (Metal)

NOTE:

If any doubt is noted in a measured value, use new tape.

- Test Tapes (New Tape)
 - TCC-112-MTT-111 Wow and Flutter, Tape Speed
 - TCC-140-MTT-112B Signal-to-Noise Ratio
 - TCC-120-MTT212 Output
 - TCC-130-MTT-150 Level Adjustment
 - TCC-161-MTT-256 Frequency Response (for Normal)
 - TCC-261-MTT-356 Frequency Response (for CrO₂ and Metal)
 - TCC-192-MTT-121 Cross Talk
 - TCC-194-MTT-141 Channel Separation
 - (A-BEX)-(TEAC)

3. OPERATIONAL DESCRIPTION OF MICRO-PROCESSOR ITS PERIPHERAL CIRCUITS

3.1 MECHANISM OF THIS UNIT

The rotation energy of the flywheel operates the head chassis movement, braking, etc. A plunger is used to eliminate the flywheel energy, so, when the mechanism is switched, pulse voltage is applied to the capstan motor and plunger.

3.2 INITIAL CHECK

With a tape loaded in the cassette holder, set the Power switch to "ON" and check for the following operations.

- (1) The operation buttons become operable 4 seconds after power is switched on.
- (2) When the mechanism is not in normal stop mode, pressing the FF or REW button lets the reel motor slip.
- (3) When the mechanism is in PLAY mode, switching the Power switch ON returns the mechanism to stop mode.

3.3 MICROPROCESSOR OPERATION CHECK

- (1) Clock generation

Figure 1 shows the waveforms at pins ① and ④② of QU01.

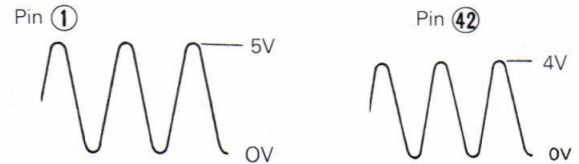


Figure 1

- (2) RES terminal

Figure 2 shows the voltage variation at pin ⑦ of QU01 which occurs when power is switched ON and OFF. All output terminals become "H" when this terminal becomes "L".

- (3) Figure 2 shows the voltage variation at pin ⑥ of QU01 which occurs when power is switched ON and OFF. Except when the mechanism is already in stop mode, it is stopped when this terminal becomes "L". When power supply is interrupted during mechanism operation, the output of Q801 which supplies voltage to pin ⑥ drops suddenly and the mechanism enters stop mode.

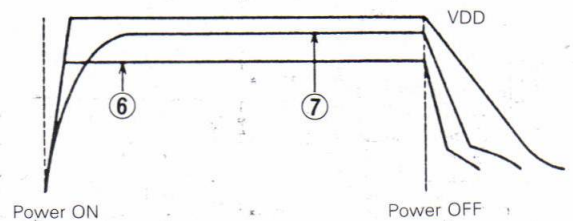


Figure 2

- (4) Input/output terminals

Pulses output at pins ⑧ to ⑪ of QU01 appear at input terminal pins ② to ⑤, ⑱ and ④① of QU01 when the corresponding operation buttons or switches are switched ON.

- (5) By the timer IC (QU71), the pulse is output to fix the 1-way mode.

3.4 F/R MOTOR DRIVER CIRCUIT

The direction of F/R motor rotation is determined by the outputs from pins ②⑥ and ②⑦ of QU01, and the winding torques in PLAY and FF/REW modes are switched by pin ①④ of QU01.

The outputs according to the pin operating conditions are shown below.

QU01 Pin NO.	STOP	FF	REW	FORWARD PLAY
②⑥	L	L	H	L
②⑦	L	H	L	H
①④	L	L	L	0.7V

H : 1.8V
L : 0V

Table 1

4. OPERATIONAL DESCRIPTIONS OF AUDIO AND PERIPHERAL CIRCUITS

The SD-45II/SD-35 uses new TDA1600 and TDD1601 ICs exclusively for the tape audio circuits.

4.1 REC/PLAY HEAD SWITCHING AND BIAS OSCILLATOR IC TDA1600

4.1.1 Built-in circuit of IC and features (Refer to Fig. 3)

- (1) R/P Head SW: Including rec/play head switching circuit.
- (2) Bias OSC: Tape bias oscillator circuit including CrO₂/Metal indication switching circuit and Normal/CrO₂/Metal shift function.

4.1.2 Block diagram

Figure 3 shows the block diagram incorporating TDA1600.

- (1) Each switching operation is performed by an electronic switching method and the input conditions are as follows:
Pin ⑬ Tape Selector: (Normal) V+, (CrO₂) V/2, (Metal) V-, Pin ⑳ Rec/Play: (Play) V-, (Rec) V+
- (2) This IC operates as a DC 15 V single power supply, however, since the audio circuit ground is fixed at 1/2 V, it functions as a ± 7.5 V dual-power supply externally.

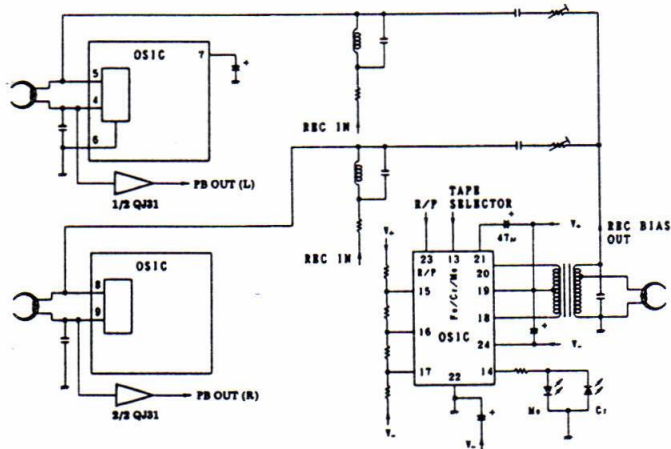
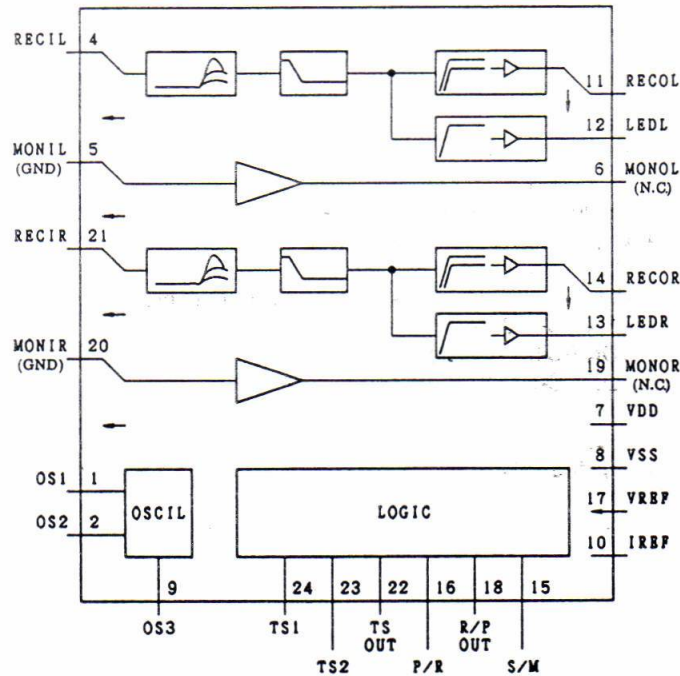


Figure 3

4.2 RECORDING EQUALIZER AMP IC TDD1601

4.2.1 Built-in circuit of IC and features

Figure 4 shows the internal construction of IC and pin connections.



PIN NO.	SIGNAL	DESCRIPTION
1	OS1	Oscillator input
2	OS2	Oscillator output
3	N.C.	
4	RECIL	Recording path input left channel
5	MONIL	Monitor path input left channel
6	MOXOL	Monitor path output left channel
7	VDD	Highest power supply
8	VSS	Lowest Power supply
9	OS3	Oscillator control
10	IREF	Current adjustment
11	RECOL	Recording path output left channel
12	LEDL	Ledbar output left channel
13	LEDR	Ledbar output right channel
14	RECOR	Recording path output right channel
15	S/M	Signal/mute input
16	P/R	Playback/record selection input
17	VREF	AC ground
18	R/P OUT	Record/playback selection output
19	MONOR	Monitor path output right channel
20	MONIR	Monitor path input right channel
21	RECIR	Recording path input right channel
22	TS OUT	Tape selection output
23	TS2	Tape selection input 2
24	TS1	Tape selection input 1

Figure 4

- (1) **Rec EQ Amp:** Recording equalizer amp using the switched capacitor method, and its compensation levels conform to IEC standard tapes. The peak frequency is determined by the clock frequency and shifted to each tape type programmably. In the SD-45II/SD-35, they are set to the following values:

Normal	17.5kHz
CrO ₂	18.5kHz
Metal	19.5kHz

Table 2

- (2) **Electrical Switching:** Rec/play and Tape Selector switching signals are output for IC internal switching and the switching TDA 1600, by each Rec/play, Tape Selector. The input signals correspond to V- to +5 V for mechanism logic, and output signals are shifted to V- to V+ level to perform electronic switching.

4.2.2 Circuit configuration (Block diagram)

Figure 5 shows the simplified block diagram of TDA1600, TDD1601 and TEA0665 (Dolby NR IC).

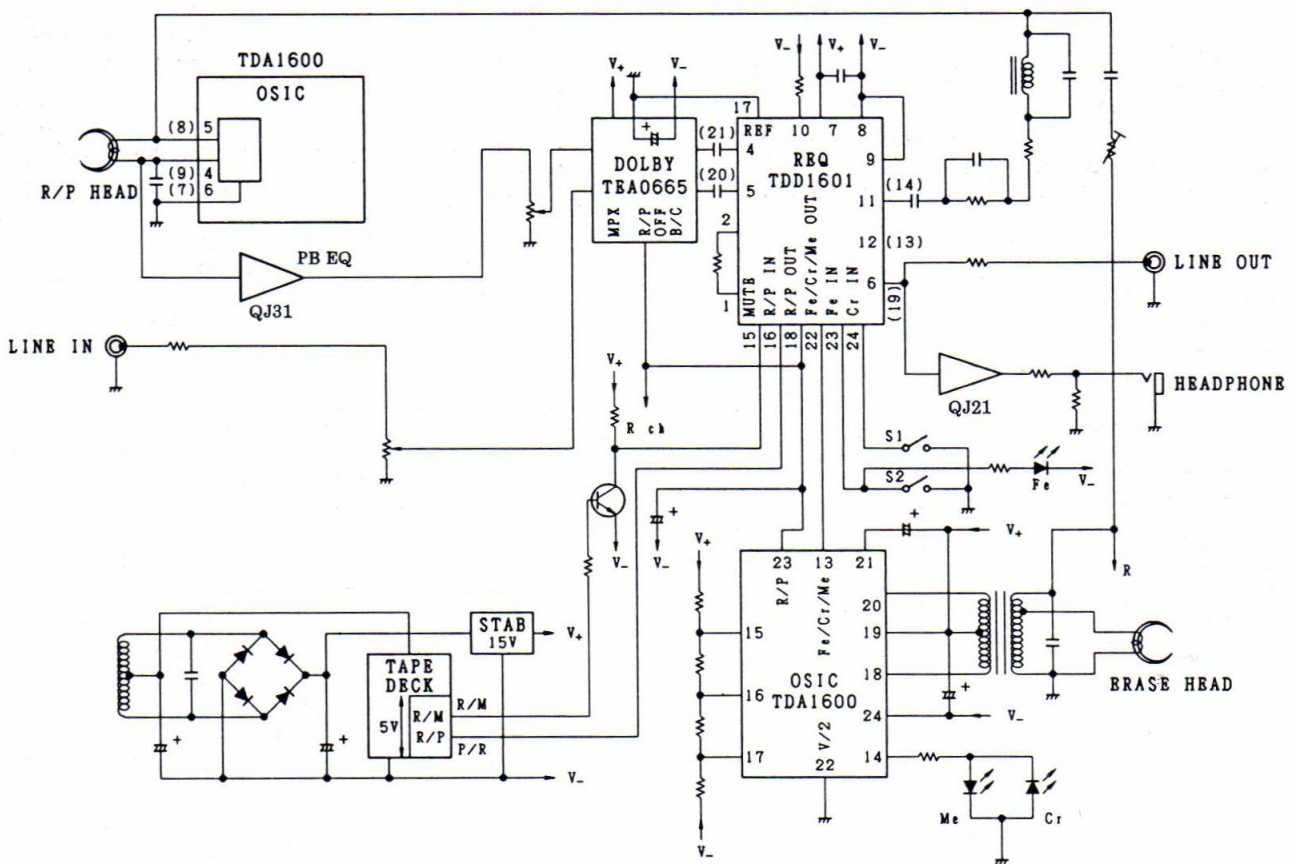


Figure 5

5. MECHANISM OPERATIONAL DESCRIPTION

5.1 STOP

The head position is always pointed in the FWD direction. (See Fig. 6)

5.2 FWD PLAY

a. When voltage is applied to the solenoid, the play arm is released by the stopper of the cam, and the cam gear is meshed with the flywheel gear and starts rotation.

b. When the cam of Item a operates, it is guided towards the cam section for FWD operation and locked in the condition shown in Fig. 9

5.3 FWD/PLAY → STOP

Voltage is applied to the solenoid to rotate the cam gear, and the mechanism returns to the condition shown in Fig. 7

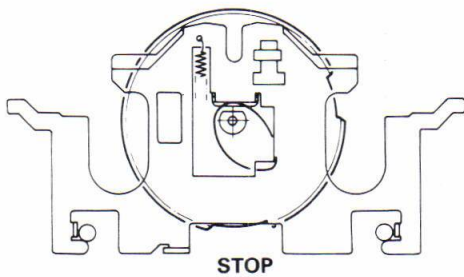


Figure 6

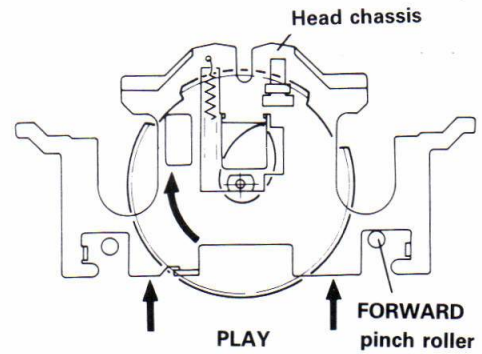


Figure 8

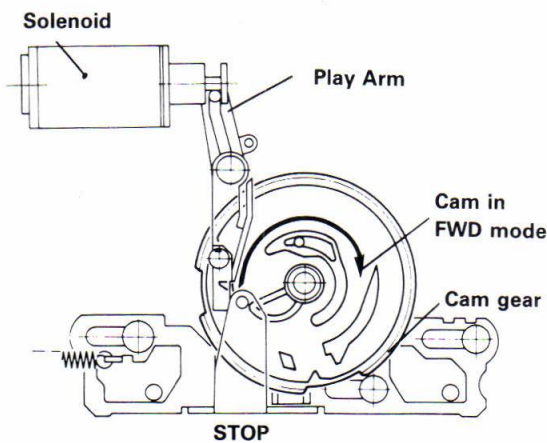


Figure 7

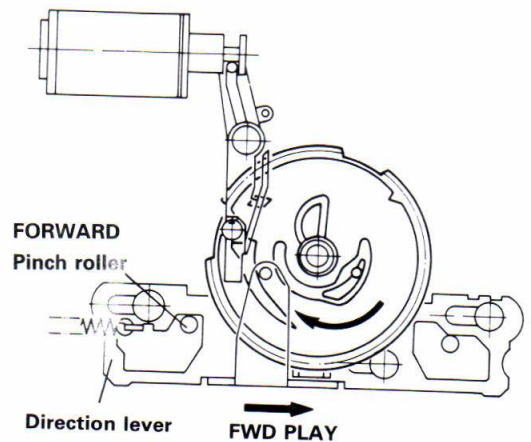
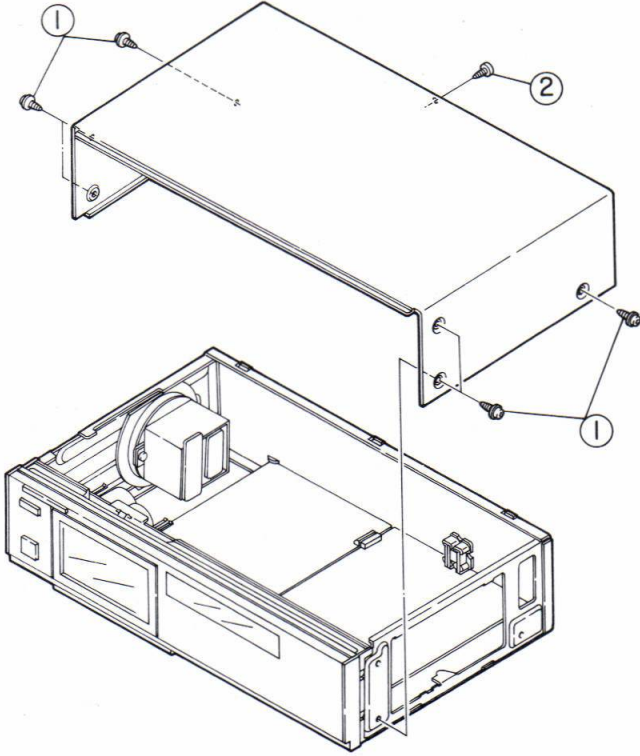


Figure 9

6. DISASSEMBLY

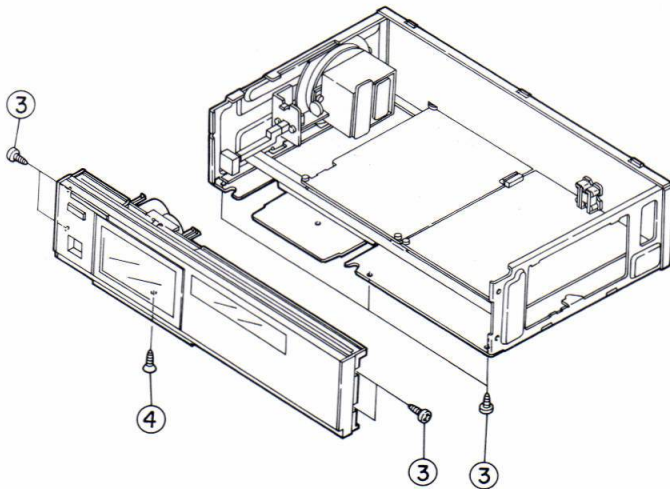
6.1 REMOVING THE TOP COVER

Remove the four screws ① and the screw ② as shown in the figure.



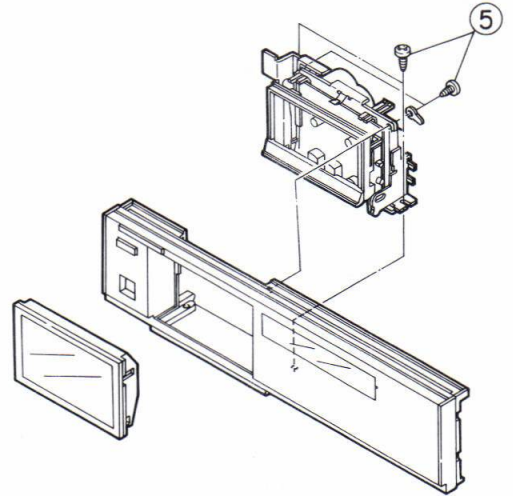
6.2 REMOVING THE FRONT PANEL

After removing the top cover, remove the seven securing screws ③ and the screw ④ as shown in the figure.



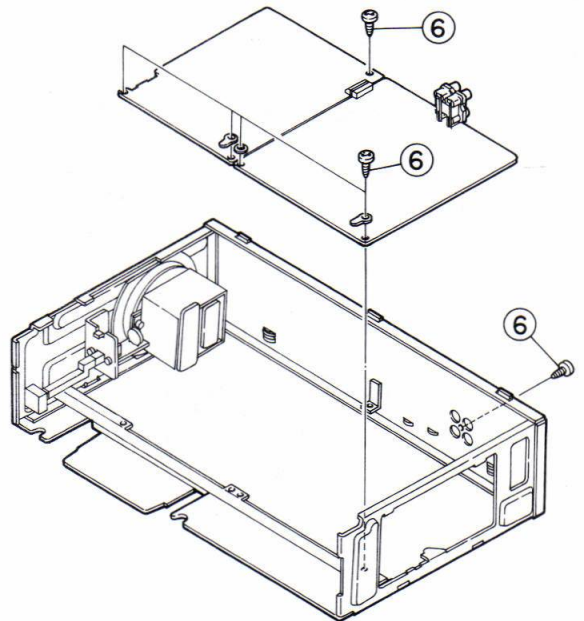
6.3 REMOVING THE MAIN P.W. BOARD

Remove the four securing screws ⑤ as shown in the figure.



6.4 REMOVING THE MECHANISM

Remove the six securing screws ⑥ as shown in the figure.



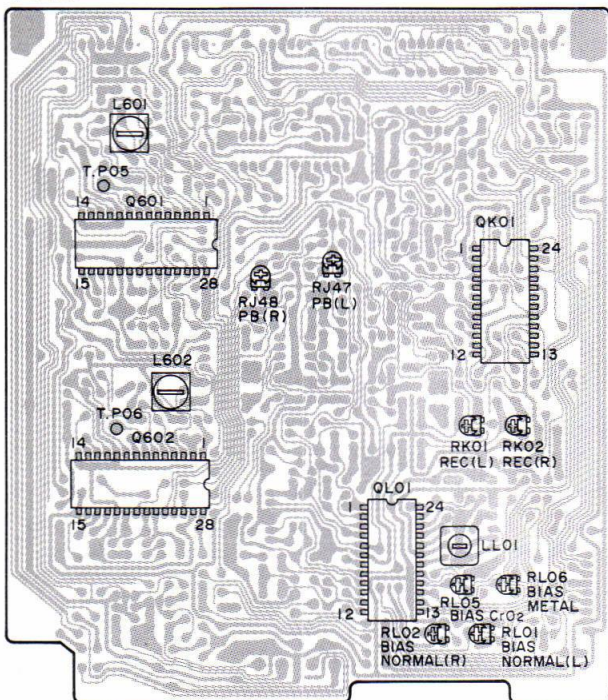
7. ELECTRICAL ADJUSTMENTS

Precautions before Adjustment

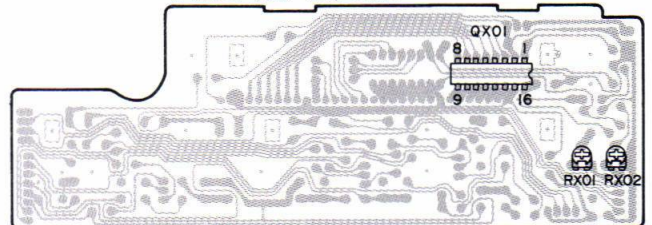
1. Before playing the test tape back, thoroughly demagnetize the heads, capstan and similar metal parts using an eraser as the test tape-recorded tone is easily erased.
2. Do not place the test tape on any measuring instrument.
3. Do not put the test tape near a place where the eraser is used.
4. Method of Demagnetization: – Turn the eraser power switch on at a remote position far away from the heads. Bring the eraser close to the heads, capstan and other parts to be demagnetized, and move it up and down four or five times to demagnetize. Slowly separate the eraser far away from the parts, and turn the power switch off.
5. Do not use any magnetize it from time to time in the course of each adjustment.
6. Do not turn semi-fixed resistor more than needed.
7. Do not apply locking bond excessively.

ADJUSTMENT POINT (COMPONENT SIDE)

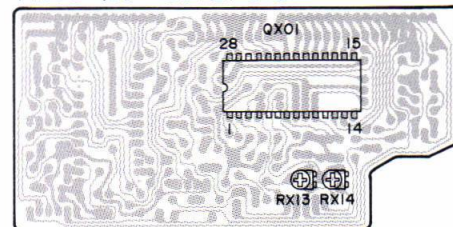
PJ03



PX03 (SD-35) ONLY



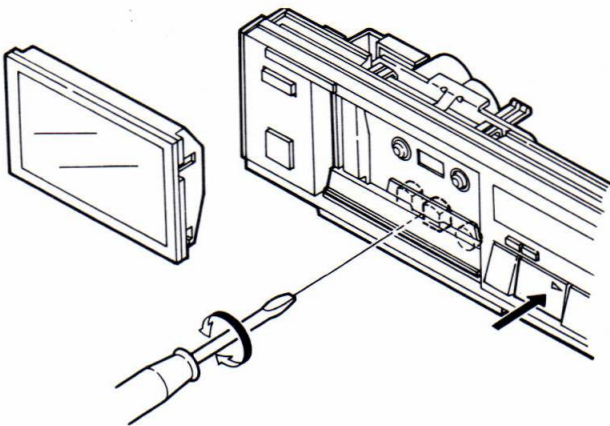
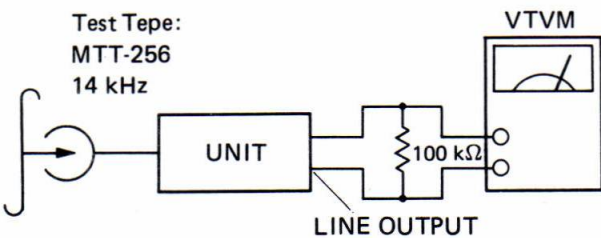
PX03 (SD-45MKII) ONLY



7.1 HEAD AZIMUTH ADJUSTMENT

1. Remove the cassette door lid.
2. Set the TAPE SELECT switch to the NORM position.
3. Play the 14 kHz signal of the test tape MTT-256, back. Adjust the head azimuth adjusting screw for maximum VTVM reading.
4. Adjust the left screw.
5. If the peak output reads of the right and left channels are different, set the screws to obtain the mechanical center between the peaks.
6. After adjustment, repeat the playback and stop setting a few times to make certain of no head azimuth deviation. Then, lock the screws with bond.

Mode: Playback



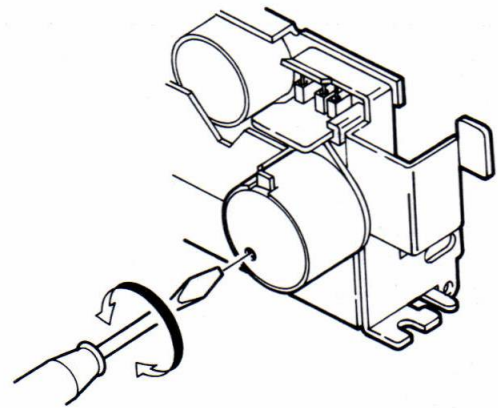
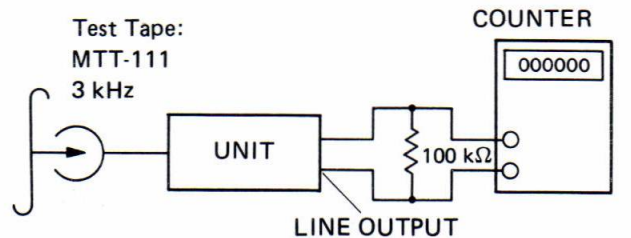
7.2 TAPE SPEED ADJUSTMENT

Play the 3 kHz signal of the test type MTT-111, back. Adjust the tape speed adjusting resistor inside the motor (M071) for 2990 to 3010 Hz counter indication,

NOTE:

1. If a strong shock of similar vibration is applied to the back after adjustment, make certain that the measured tape speed had not changed.
2. Be careful that the frequency counter may indicate a wrong value because of too low counter input level.
3. Before adjustment, allow for 30 seconds or more after depressing of the PLAY button.

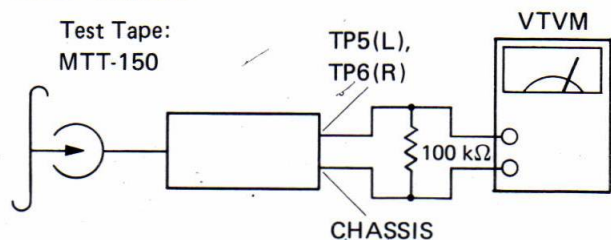
Mode: Playback



7.3 PLAY BACK OUTPUT LEVEL AND METER ADJUSTMENTS

1. Play the test tape MTT-150, and adjust RJ47 (L), RJ48 (R), in the audio P.W board (PJ03) so that the playback output at TP5 (L), TP6 (R), Dolby NR circuits becomes 390 mV.
2. In the above condition, adjust RX13 (L) and RX14 (R) in the PX03 meter P.W. board so that the meter reading is 0 dB (00 mark indicating point).

Mode: Playback

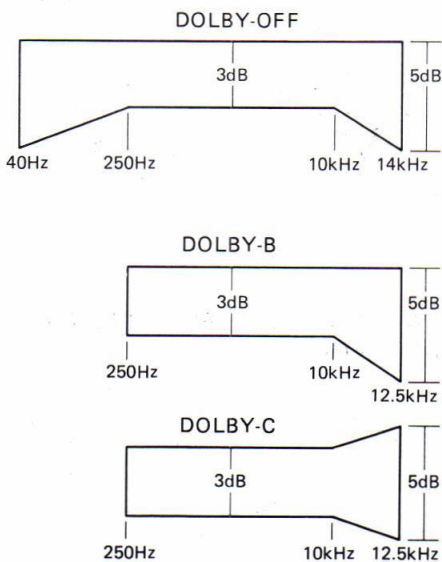


7.4 REC/PLAY FREQUENCY CHARACTERISTIC ADJUSTMENT/MEASUREMENT (NORMAL)

1. Load the AC-212 test tape in the cassette holder, reduce the Dolby level by -22 dB using the attenuator, and record 1 kHz and 12.5 kHz on non-recorded portion. (DOLBY-C position)
2. Adjust RL01 (L) and RL02 (R) in the PJ03 P.W. board so that 1 kHz and 12.5 kHz frequencies become 0 ± 1.0 dB when the tape is played back after rewinding.
3. After adjustment, record 1 kHz, 10 kHz and 12.5 kHz, and check that the playback level differences of those frequencies are as given below.
4. With the DOLBY switch at position "B", record 1 kHz, 10 kHz and 12.5 kHz, and check that their playback level differences are as given below.
5. With the DOLBY switch OFF, record 1 kHz, 10 kHz and 12.5 kHz, and check that their playback level differences are as given below.
6. With DOLBY OFF, check that the L/R channel balance for 10 kHz is less than 3 dB.

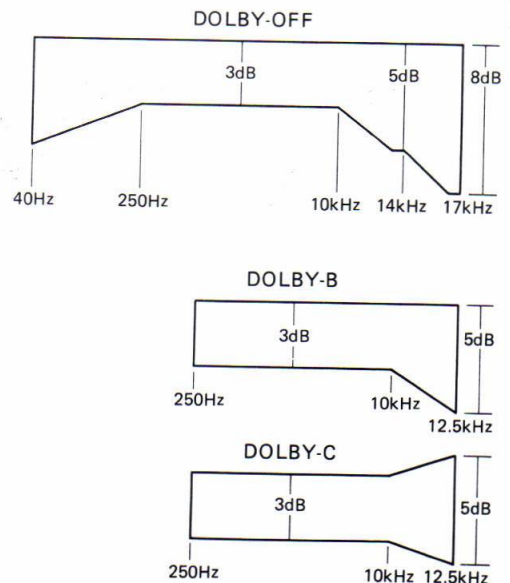
NOTE:

When 1 kHz level difference in DOLBY-C mode is 1 dB or more compared to the monitor, adjust RK01 (L) and RK02 (R) for the REC LEVEL adjustment previously, so that the difference is within 1 dB.



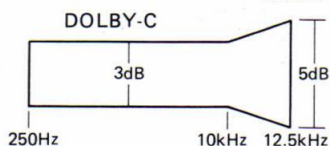
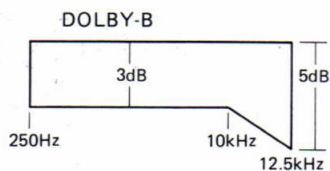
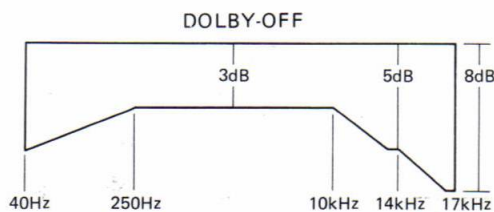
7.5 REC/PLAY FREQUENCY CHARACTERISTIC ADJUSTMENT/MEASUREMENT (CrO₂)

1. Load the AC-512 test tape in the cassette holder, reduce the Dolby level by -22 dB using the attenuator, and record 1 kHz and 12.5 kHz on non-recorded portion. (DOLBY-C position)
2. Adjust RL05 in the PJ03 P.W. board so that 1 kHz and 12.5 kHz frequencies become 0 ± 1.0 dB when the tape is played back after rewinding.
3. After adjustment, record 1 kHz, 10 kHz and 12.5 kHz, and check that the playback level differences of those frequencies are as given below.
4. With the DOLBY switch at position "B", record 1 kHz, 10 kHz and 12.5 kHz, and check that their playback level differences are as given below.
5. With the DOLBY switch OFF, record 1 kHz, 10 kHz and 15 kHz, and check that their playback level differences are as given below.
6. With DOLBY OFF, check that the L/R channel balance for 10 kHz is less than 3 dB.



7.6 REC/PLAY FREQUENCY CHARACTERISTIC ADJUSTMENT/MEASUREMENT (METAL)

1. Load the AC-712 test tape in the cassette holder, reduce the Dolby level by -22 dB using the attenuator, and record 1 kHz and 12.5 kHz on non-recorded portion. (DOLBY-C position)
2. Adjust RL06 in the PJ03 P.W. board so that 1 kHz and 12.5 kHz frequencies become 0 ± 1.0 dB when the tape is played back after rewinding.
3. After adjustment, record 1 kHz, 10 kHz and 12.5 kHz, and check that their playback level differences of those frequencies are as given below.
4. With the DOLBY switch at position "B", record 1 kHz, 10 kHz and 12.5 kHz, and check that their playback level differences are as given below.
5. With the DOLBY switch OFF, record 1 kHz, 10 kHz and 15 kHz, and check that their playback level differences are as given below.
6. With DOLBY OFF, check that the L/R channel balance for 10 kHz is less than 3 dB.

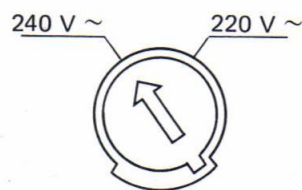


8. VOLTAGE CONVERSION

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

CAUTION:
DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE. DO NOT DISASSEMBLE THE VOLTAGE SELECTOR ABSOLUTELY.

VOLTAGE SELECTOR

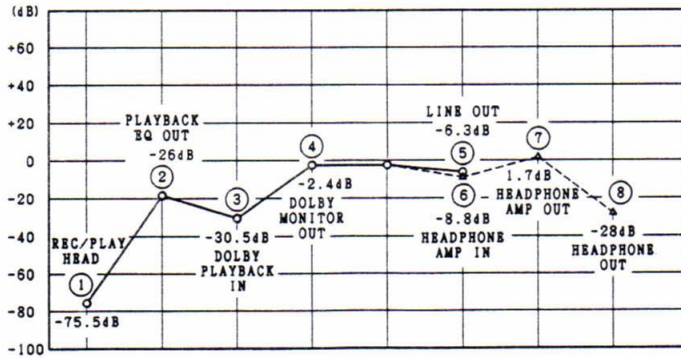
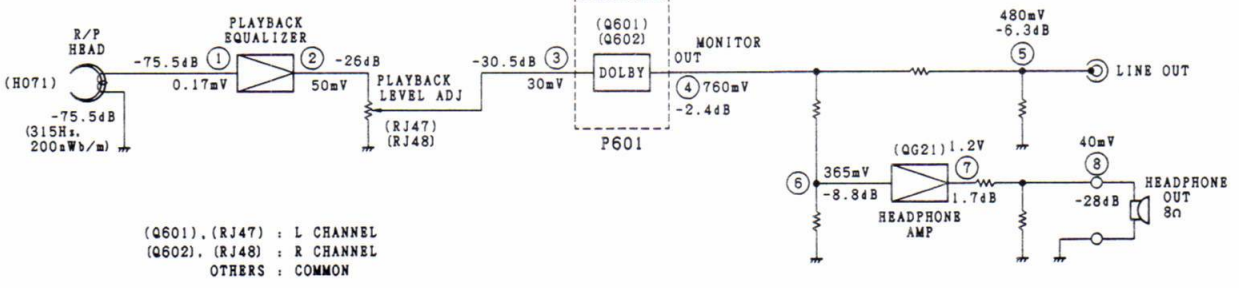


(N, A) Version

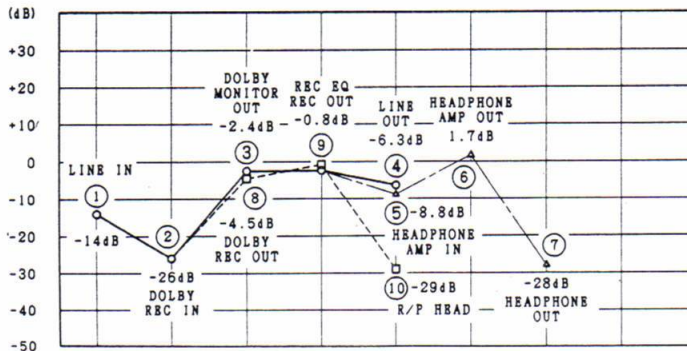
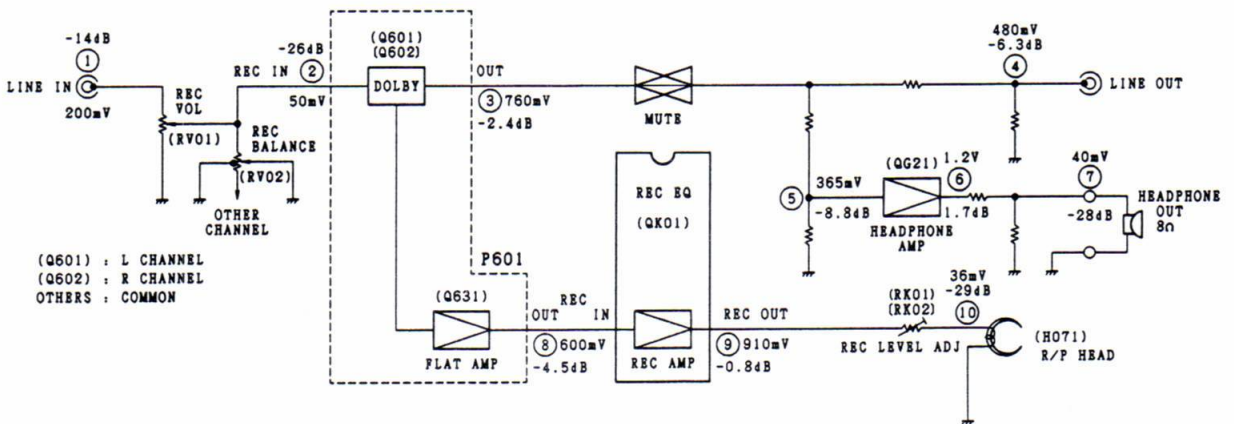
NOTE ON SAFETY:
SYMBOL \triangle FIRE OR ELECTRICAL SHOCK HAZARD. ONLY ORIGINAL PARTS SHOULD BE USED TO REPLACE ANY PART MARKED WITH SYMBOL \triangle . ANY OTHER COMPONENT SUBSTITUTION (OTHER THAN ORIGINAL TYPE), MAY INCREASE RISK OF FIRE OR ELECTRICAL SHOCK HAZARD.

9. BLOCK AND LEVEL DIAGRAM

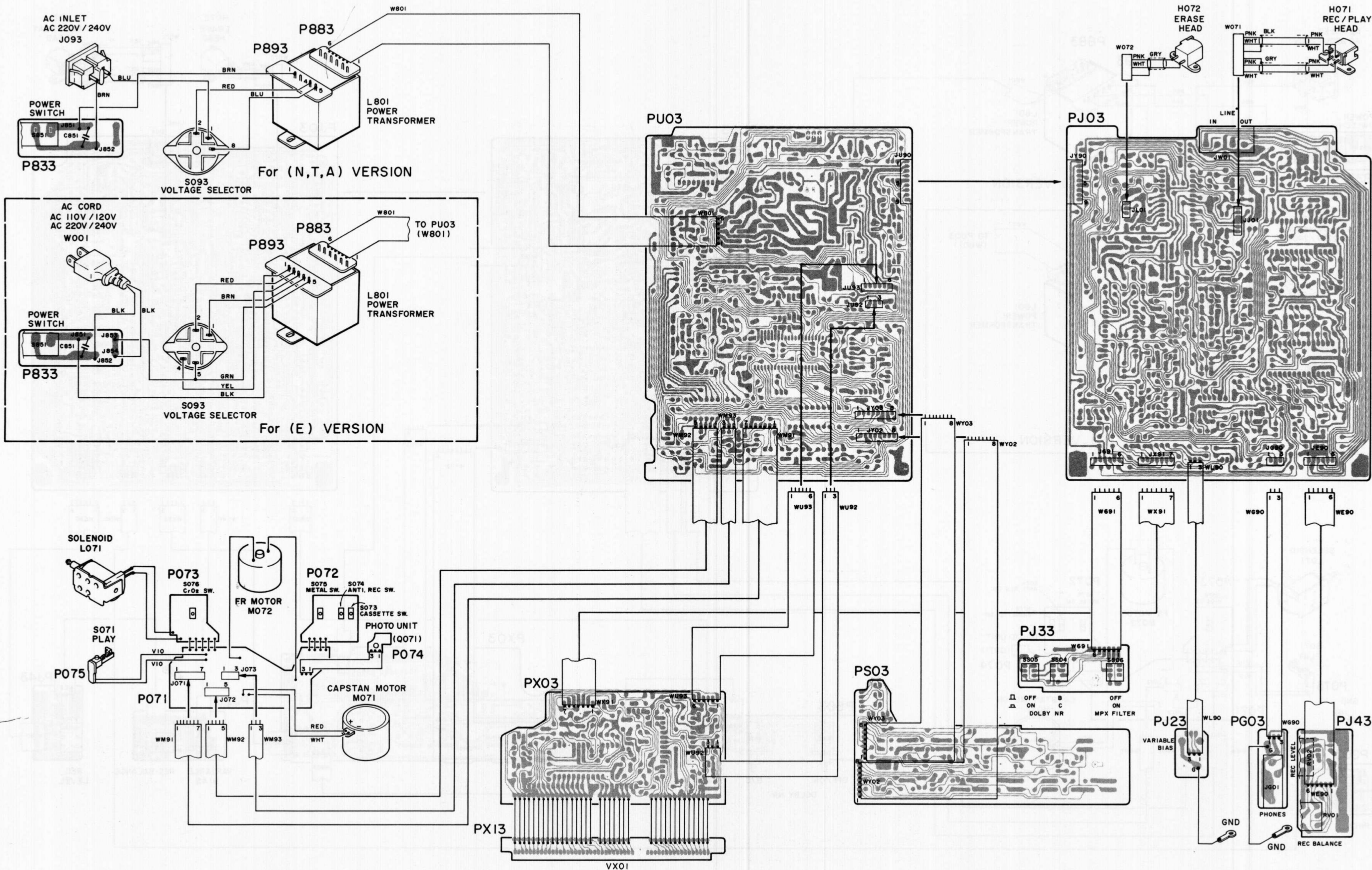
PLAYBACK LEVEL DIAGRAM

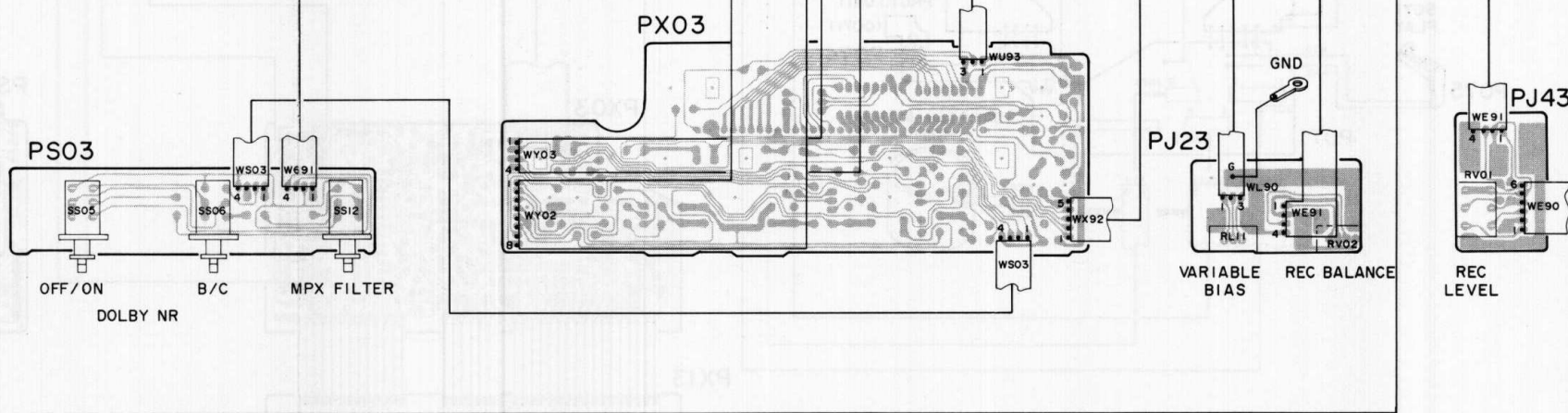
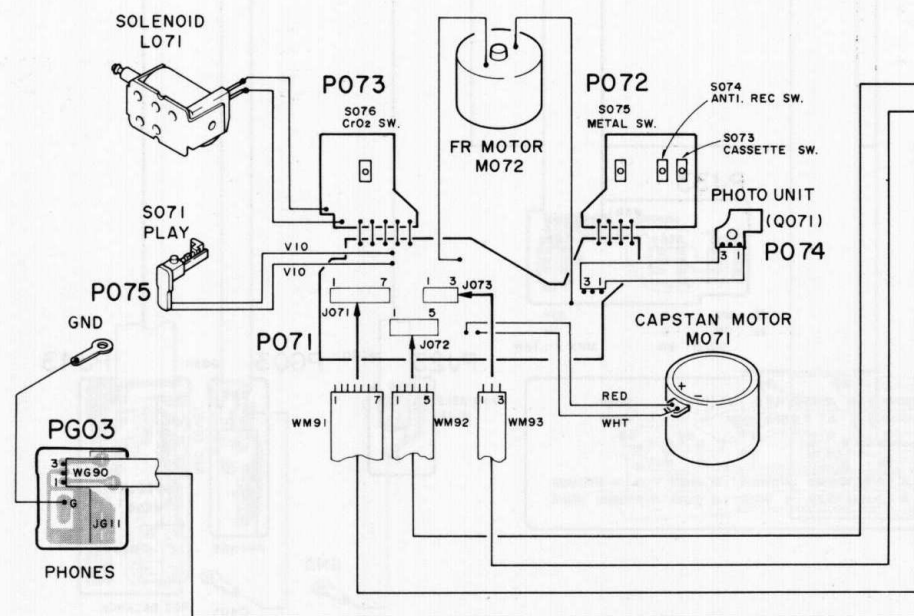
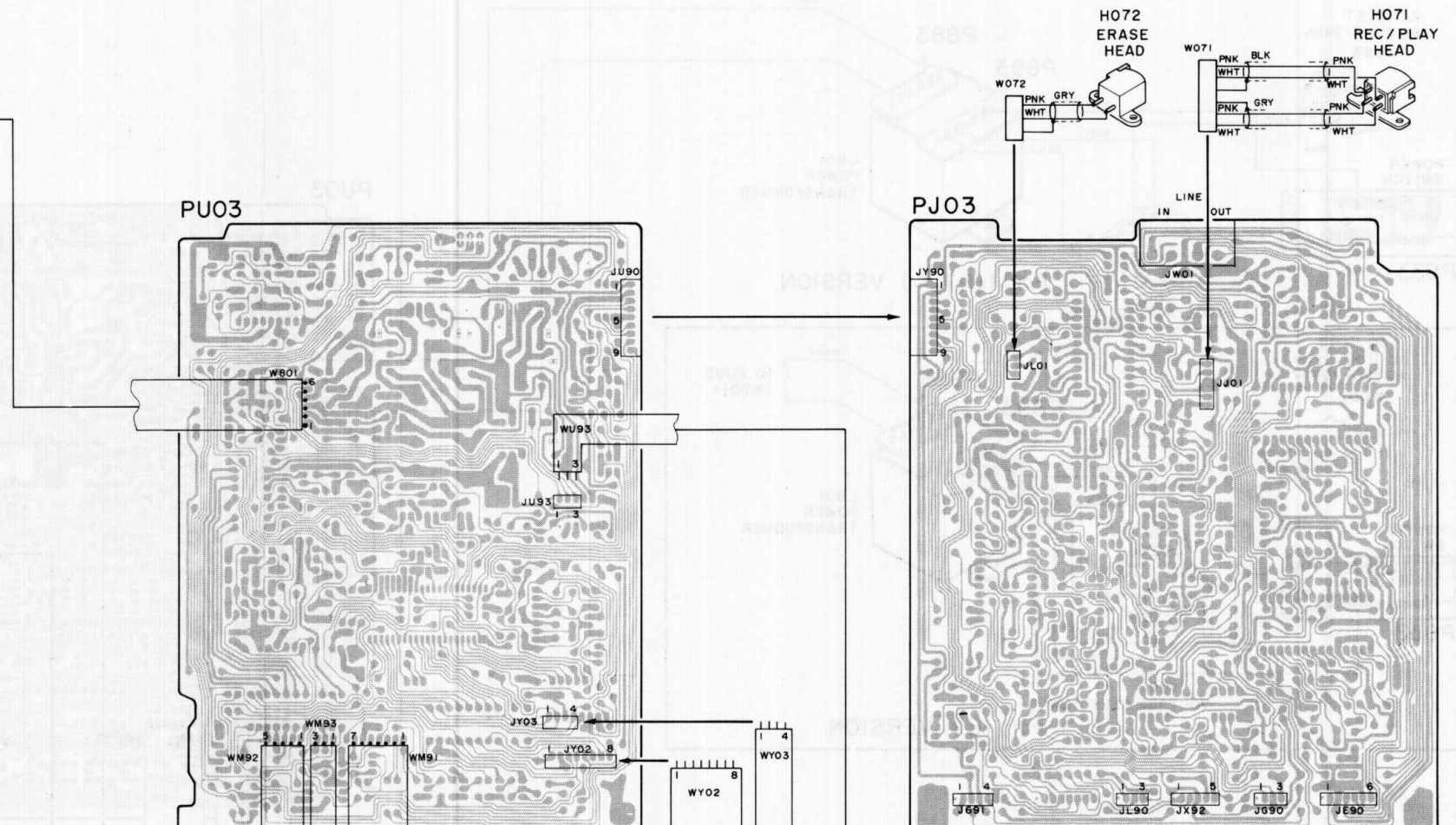
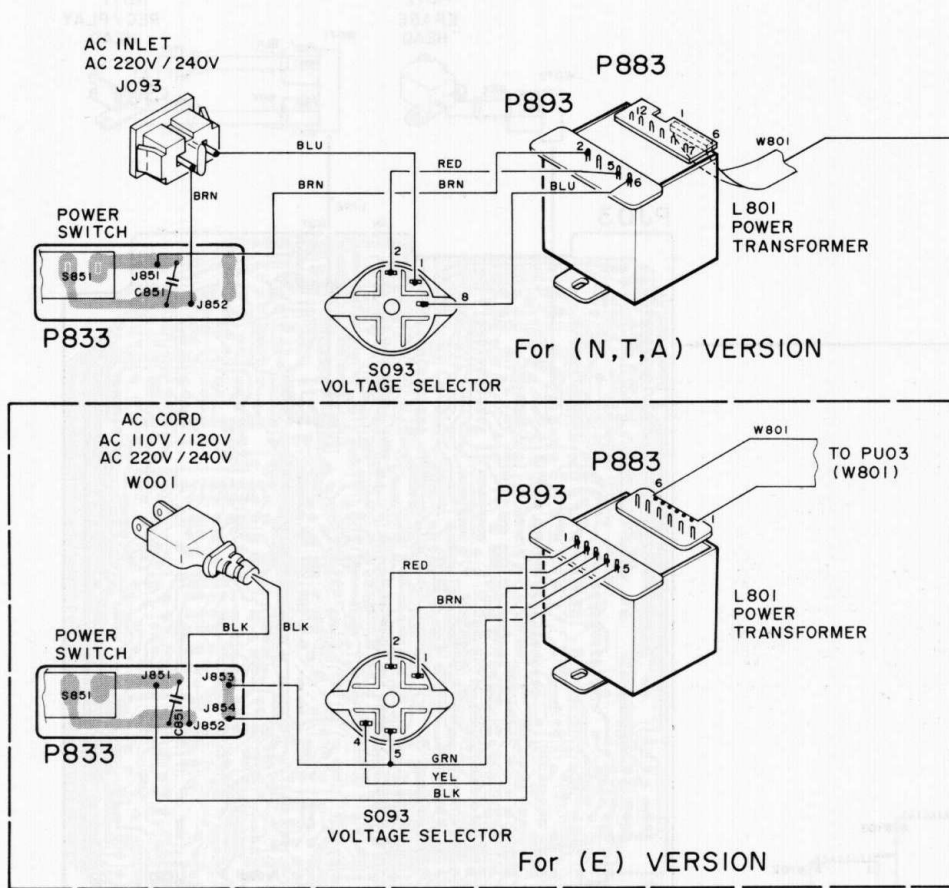


REC. LEVEL DIAGRAM



10. WIRING DIAGRAM (Component Side)

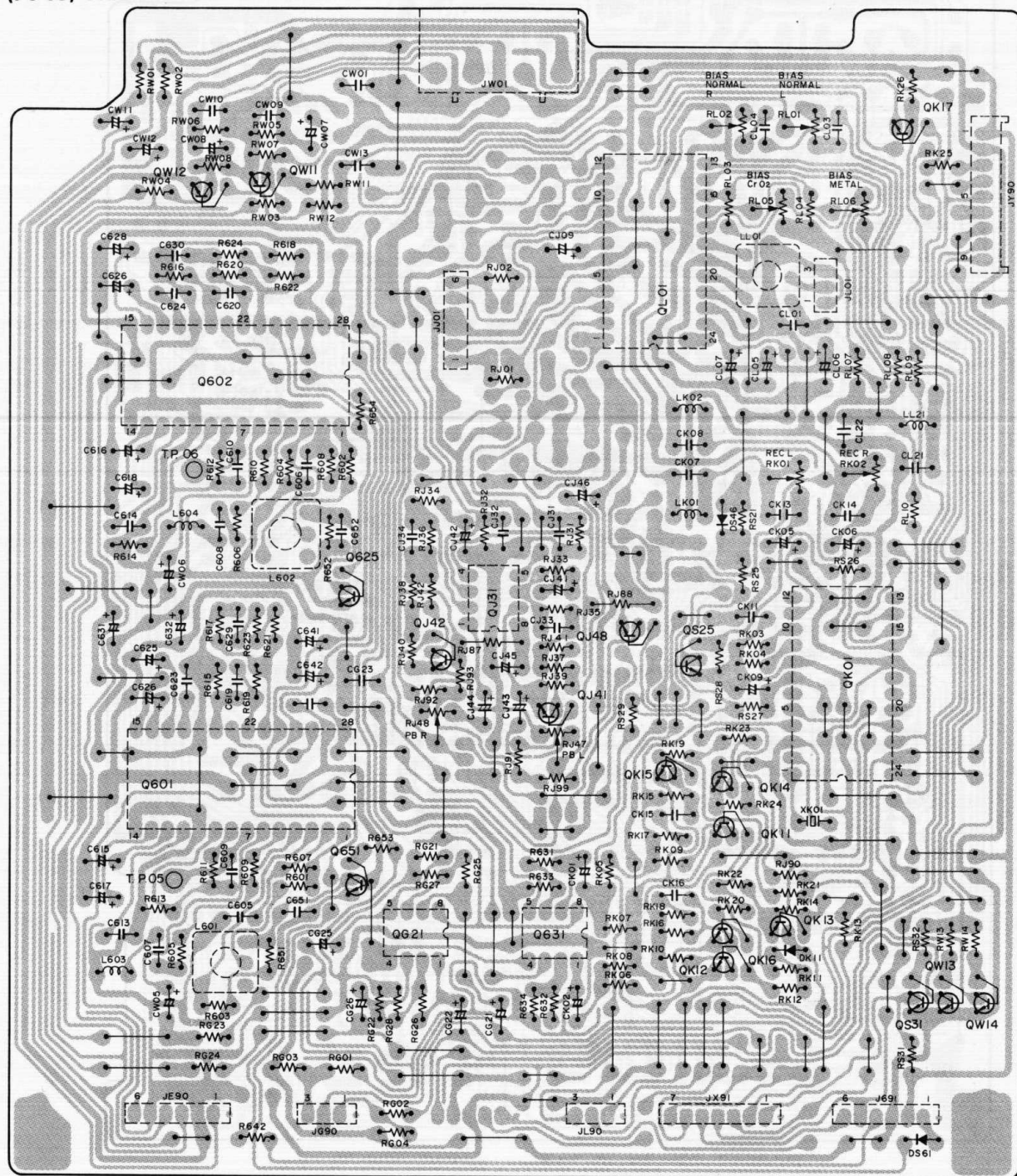




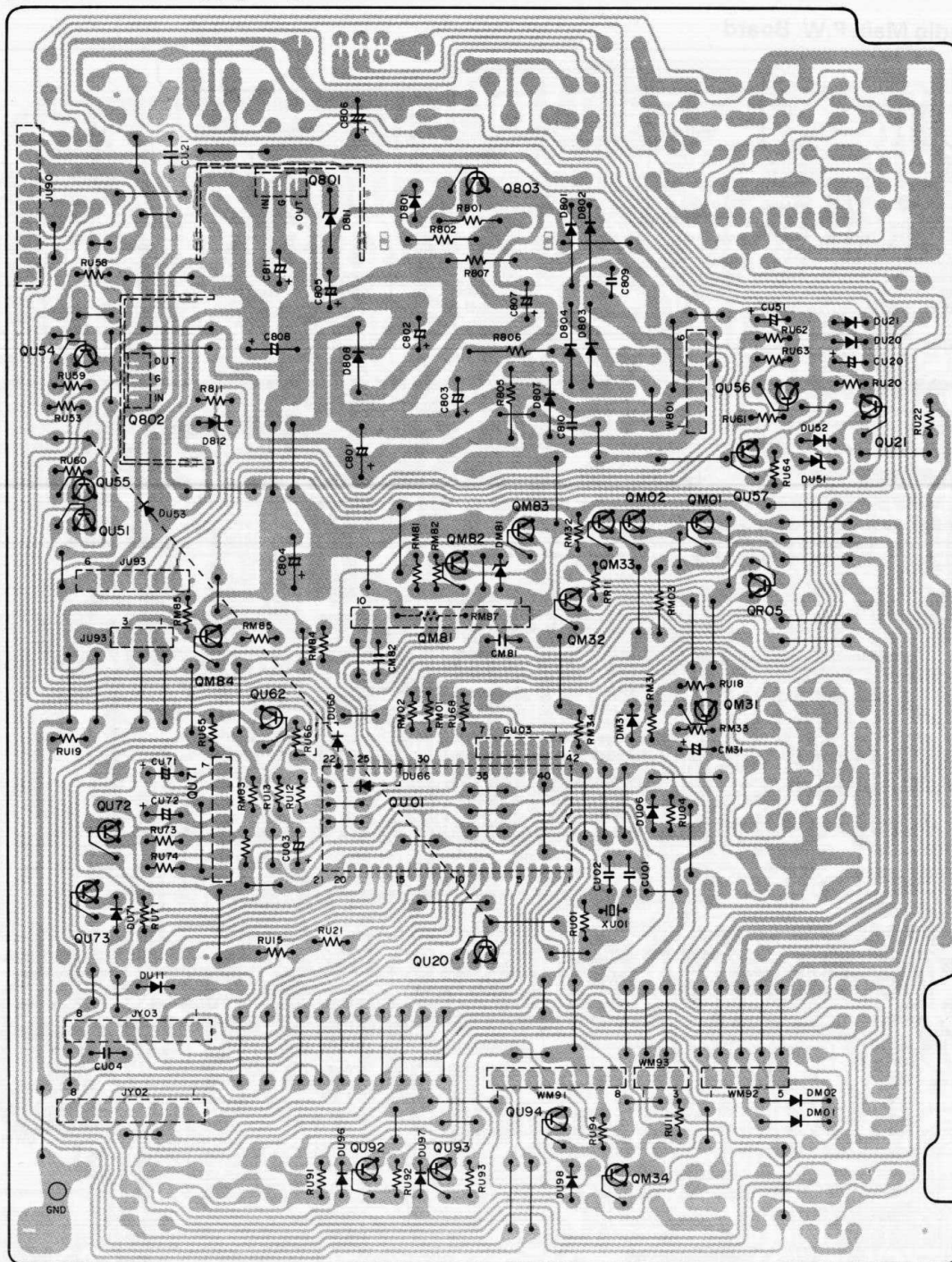
11. PARTS LOCATION (Pattern Side)

Model SD-45II

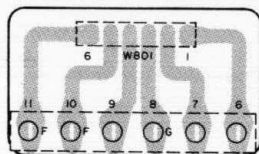
(PJ 03) Audio Main P.W. Board



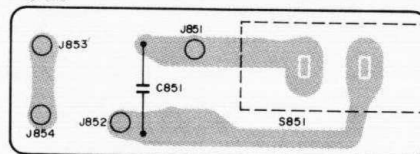
(PU 03) Power Supply/Logic Main P.W. Board



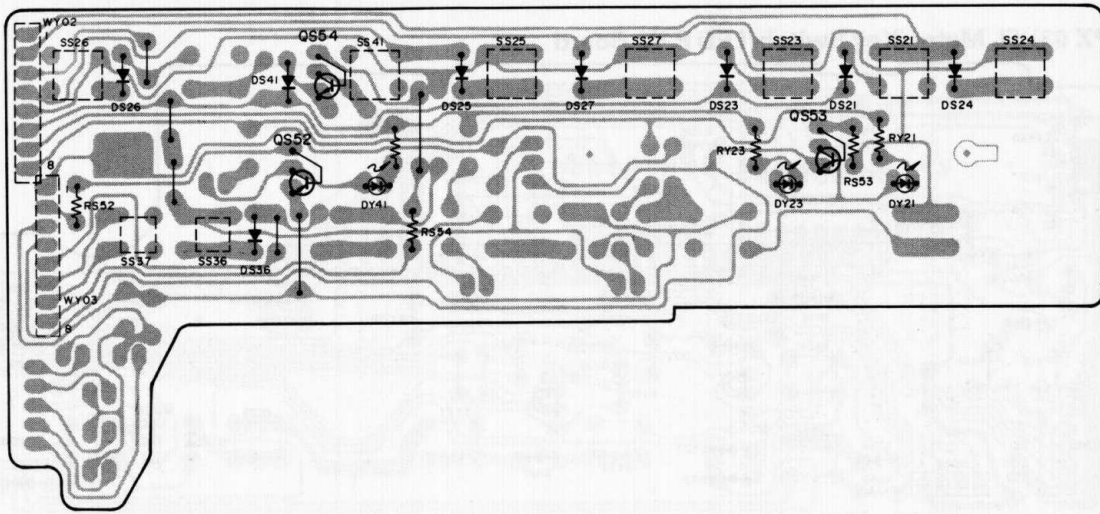
(P883) Power Transf. Connector P.W. Board



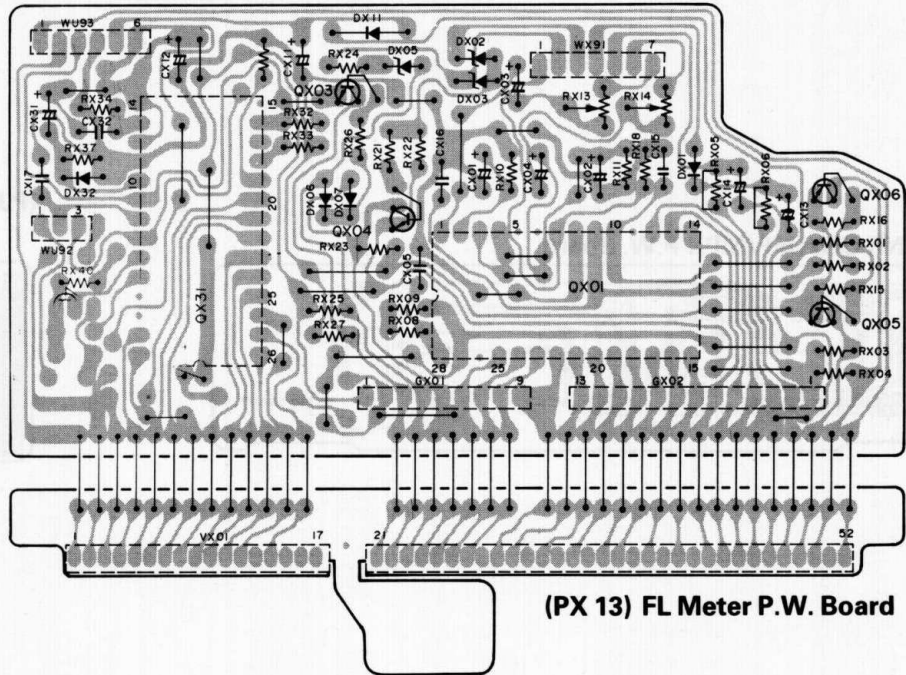
P833



(PS 03) Logic Switch/LED indicator P.W. Board

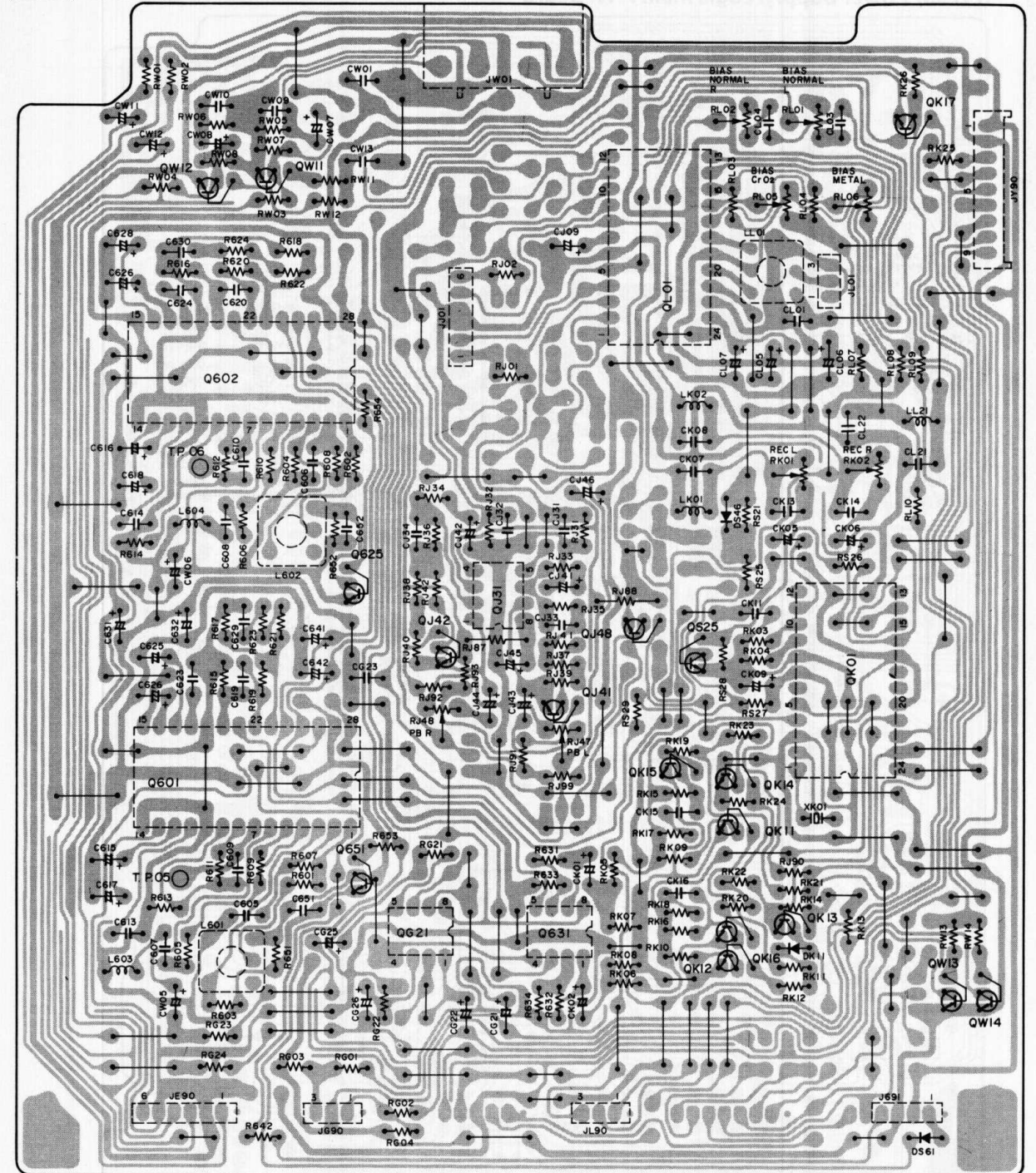


(PX 03) FL Meter/Counter Driver P.W. Board

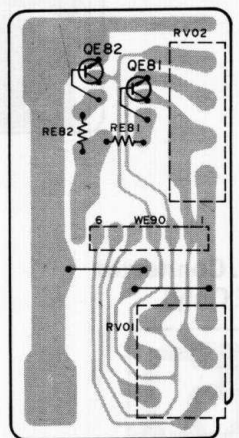


(PX 13) FL Meter P.W. Board

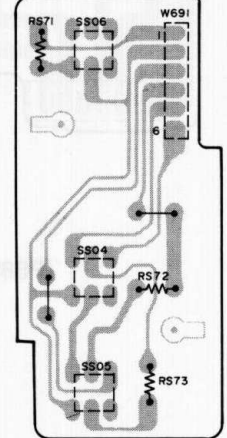
(PJ 03) Audio Main P.W. Board



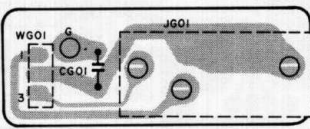
(PJ 43) Rec Volume P.W. Board



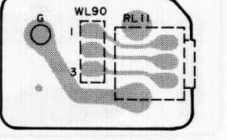
(PJ 33) NR Switch/MPX Switch P.W. Board



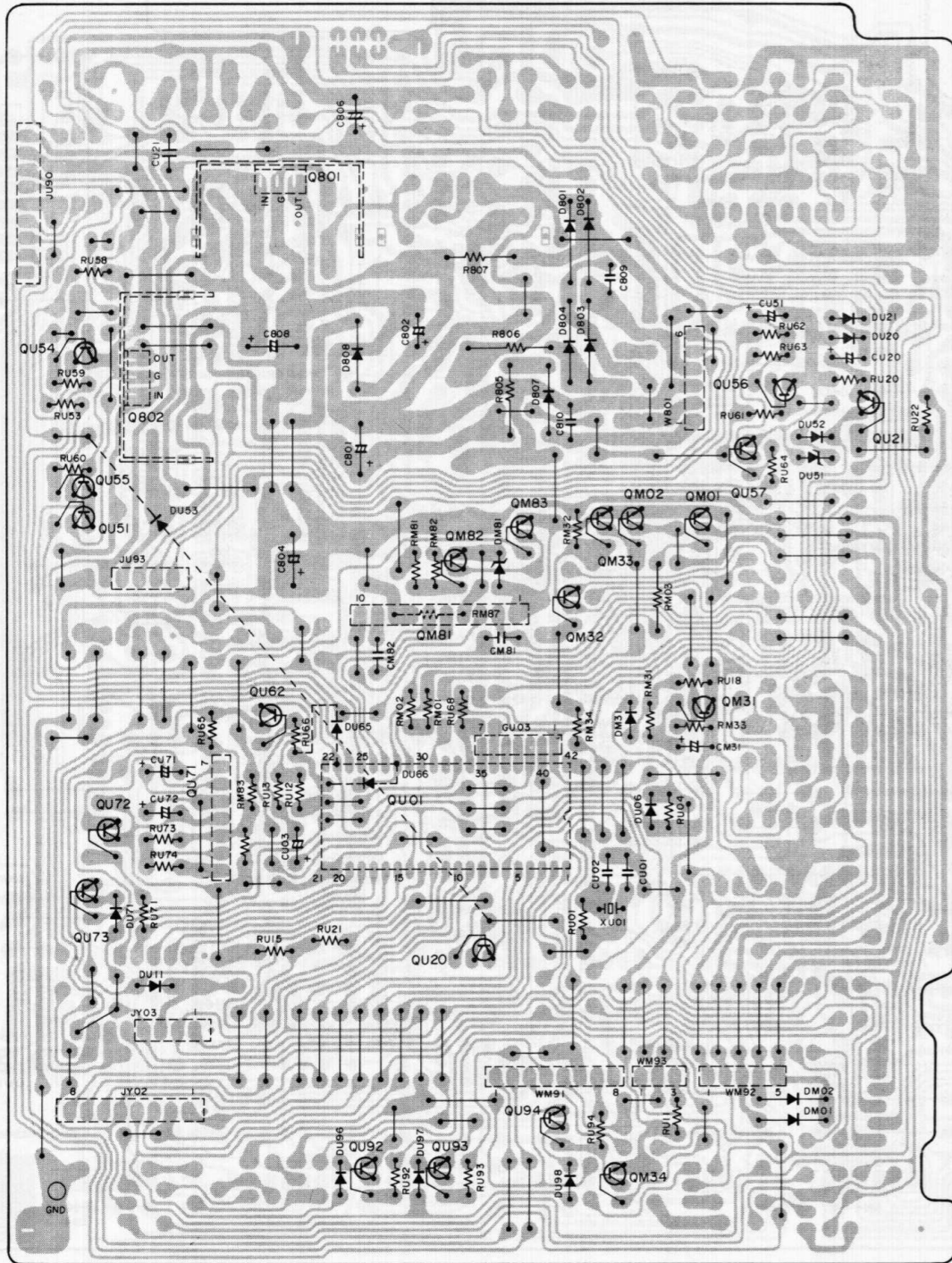
(PG 03) Headphone Jack P.W. Board



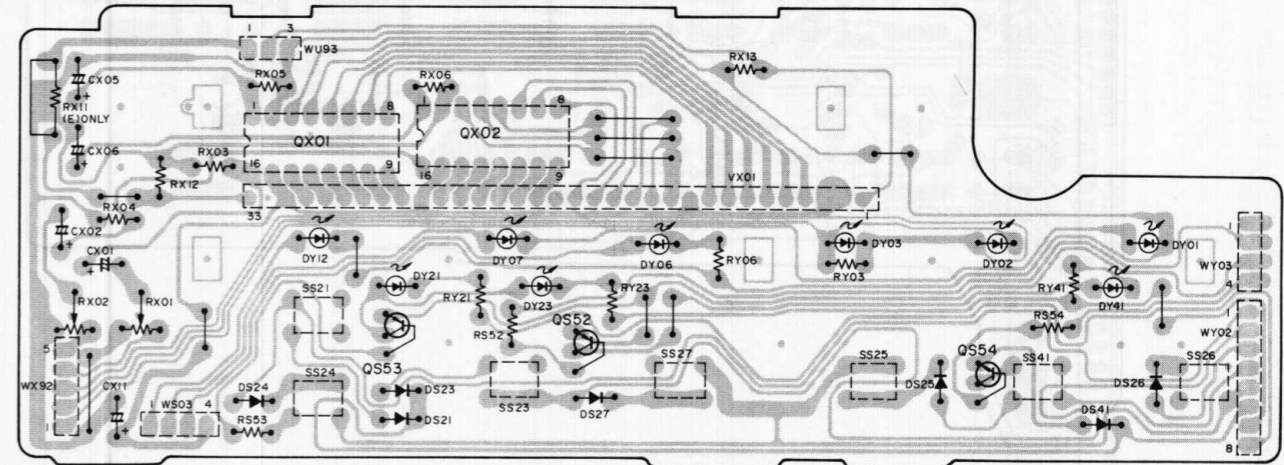
(PJ 23) Bias Fine Volume P.W. Board



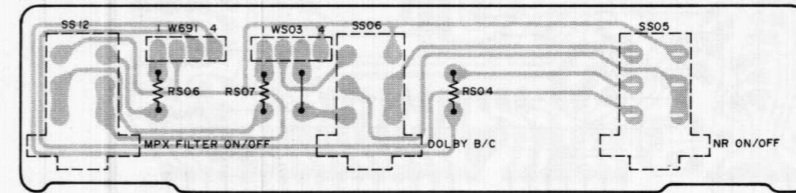
(PU 03) Power Supply/Logic Main P.W. Board



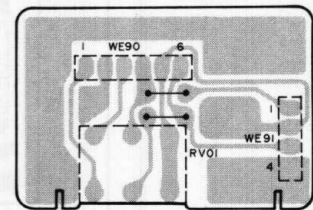
(PX 03) FL Meter/Key Switch/LED P.W. Board



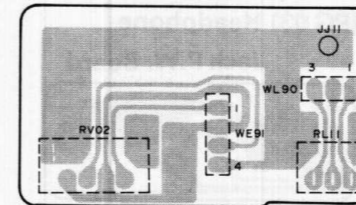
(PS 03) NR ON/OFF/MPX P.W. Board



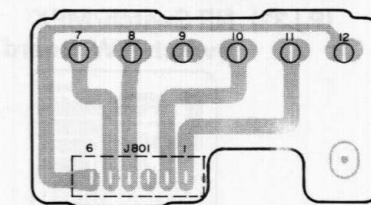
(PJ 43) Rec Volume P.W. Board



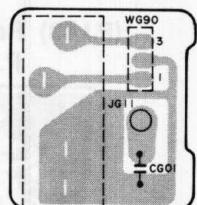
(PJ 23) Bias Fine Volume P.W. Board



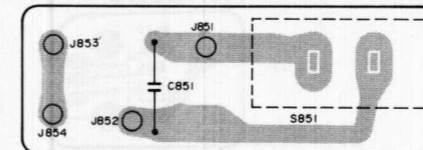
(P883) Power Switch P.W. Board (N.T.A Only)



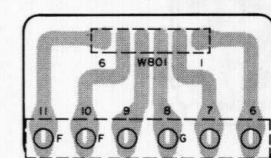
(PG 03) Headphone Jack P.W. Board



(P833) Power Switch P.W. Board

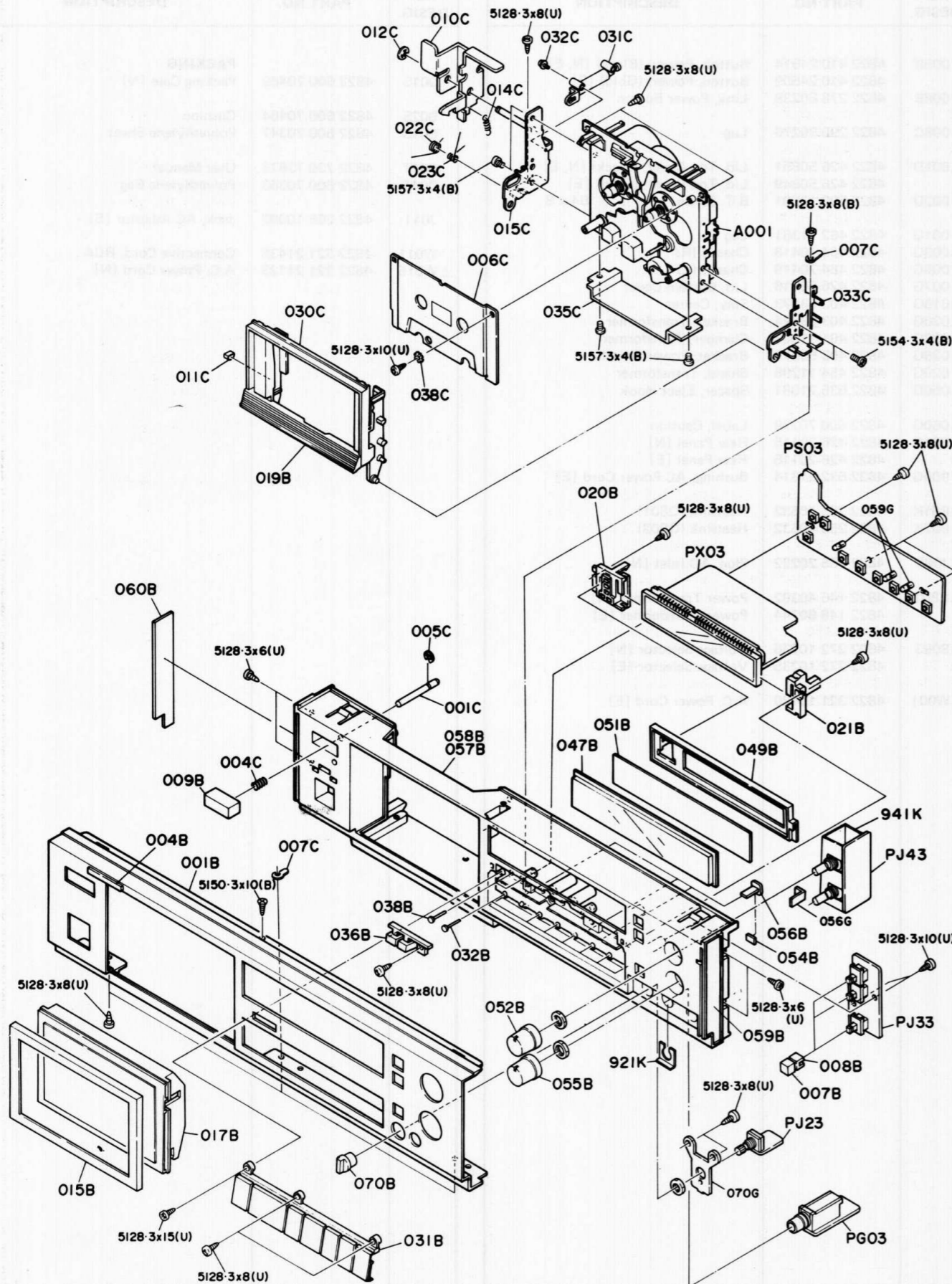


(P883) Power Transf. Connector P.W. Board (E Only)



12. EXPLODED VIEWS AND PARTS LIST

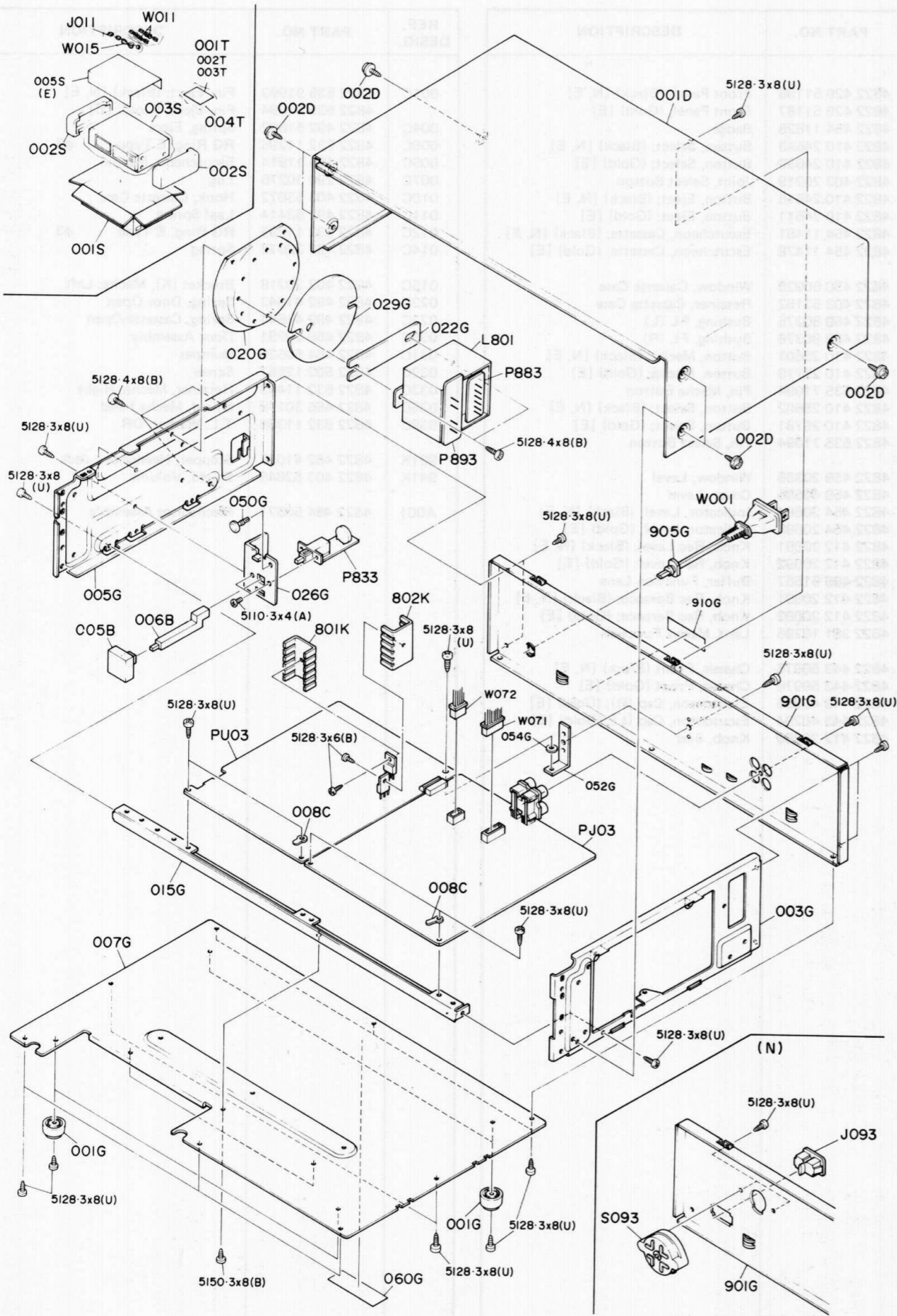
[P01-99] FRONT PANEL AND ASSOCIATED MECHANISM FOR CASSETTE TAPE OPERATION



REF. DESIG.	PART NO.	DESCRIPTION
001B	4822 426 51188	Front Panel, (Black) [N, E]
	4822 426 51187	Front Panel, (Gold) [E]
004B	4822 454 11825	Badge
007B	4822 410 24643	Button, Select; (Black) [N, E]
	4822 410 24639	Button, Select; (Gold) [E]
008B	4822 403 20219	Joint, Select Button
009B	4822 410 24515	Button, Eject; (Black) [N, E]
	4822 410 24511	Button, Eject; (Gold) [E]
015B	4822 454 11481	Escutcheon, Cassette; (Black) [N, E]
	4822 454 11478	Escutcheon, Cassette; (Gold) [E]
017B	4822 450 60925	Window, Cassette Case
019B	4822 403 53152	Retainer, Cassette Case
020B	4822 459 80375	Bushing, FL (L)
021B	4822 459 80376	Bushing, FL (R)
031B	4822 410 25601	Button, Mecha; (Black) [N, E]
	4822 410 25779	Button, Mecha; (Gold) [E]
032B	4822 535 71094	Pin, Mecha Button
036B	4822 410 25602	Button, Select; (Black) [N, E]
	4822 410 25781	Button, Select; (Gold) [E]
038B	4822 535 71094	Pin, Select Button
047B	4822 459 20355	Window, Level
049B	4822 459 40585	Cover, Level
051B	4822 454 20664	Indicator, Level; (Black) [N, E]
	4822 454 20698	Indicator, Level; (Gold) [E]
052B	4822 412 20091	Knob, Rec Level; (Black) [N, E]
	4822 412 20092	Knob, Rec Level; (Gold) [E]
054B	4822 466 61567	Buffer, Function Lens
055B	4822 412 20091	Knob, Rec Barance; (Black) [N, E]
	4822 412 20092	Knob, Rec Barance; (Gold) [E]
056B	4822 381 10795	Lens, Mecha Function
057B	4822 443 50976	Chassis, Front (Black) [N, E]
058B	4822 443 50976	Chassis, Front (Gold) [E]
059B	4822 443 40295	Escutcheon, Cap (R); (Gold) [E]
060B	4822 443 40294	Escutcheon, Cap (L); (Gold) [E]
070B	4822 412 20999	Knob, Bias

REF. DESIG.	PART NO.	DESCRIPTION
001C	4822 535 91993	Pin, Eject; (Black) [N, E]
	4822 535 91994	Pin, Eject; (Gold) [E]
004C	4822 492 51692	Spring, Eject
005C	4822 532 11295	RG Ring, E Type $\phi 3$
006C	4822 454 11914	Escutcheon, Mecha
007C	4822 290 30276	Lug
010C	4822 403 53072	Hook, Cassette Case
011C	4822 492 63414	Leaf Spring
012C	4822 532 11295	RG Ring, E Type $\phi 3$
014C	4822 492 32672	Spring
015C	4822 403 20218	Bracket (K), Mecha; Left
022C	4822 492 41643	Spring, Door Open
023C	4822 492 41644	Spring, Cassette Open
030C	4822 459 20391	Door Assembly
031C	4822 464 50528	Dumper
032C	4822 502 12557	Screw
033C	4822 532 11443	Retainer, Mecha; Right
035C	4822 466 30178	Shield, Mecha Head
038C	4822 532 11388	T.L. Washer, OR
921K	4822 462 41037	Stopper, Headphone Jack
941K	4822 403 52845	Shield, Volume
A001	4822 464 50671	Mechanism Assembly

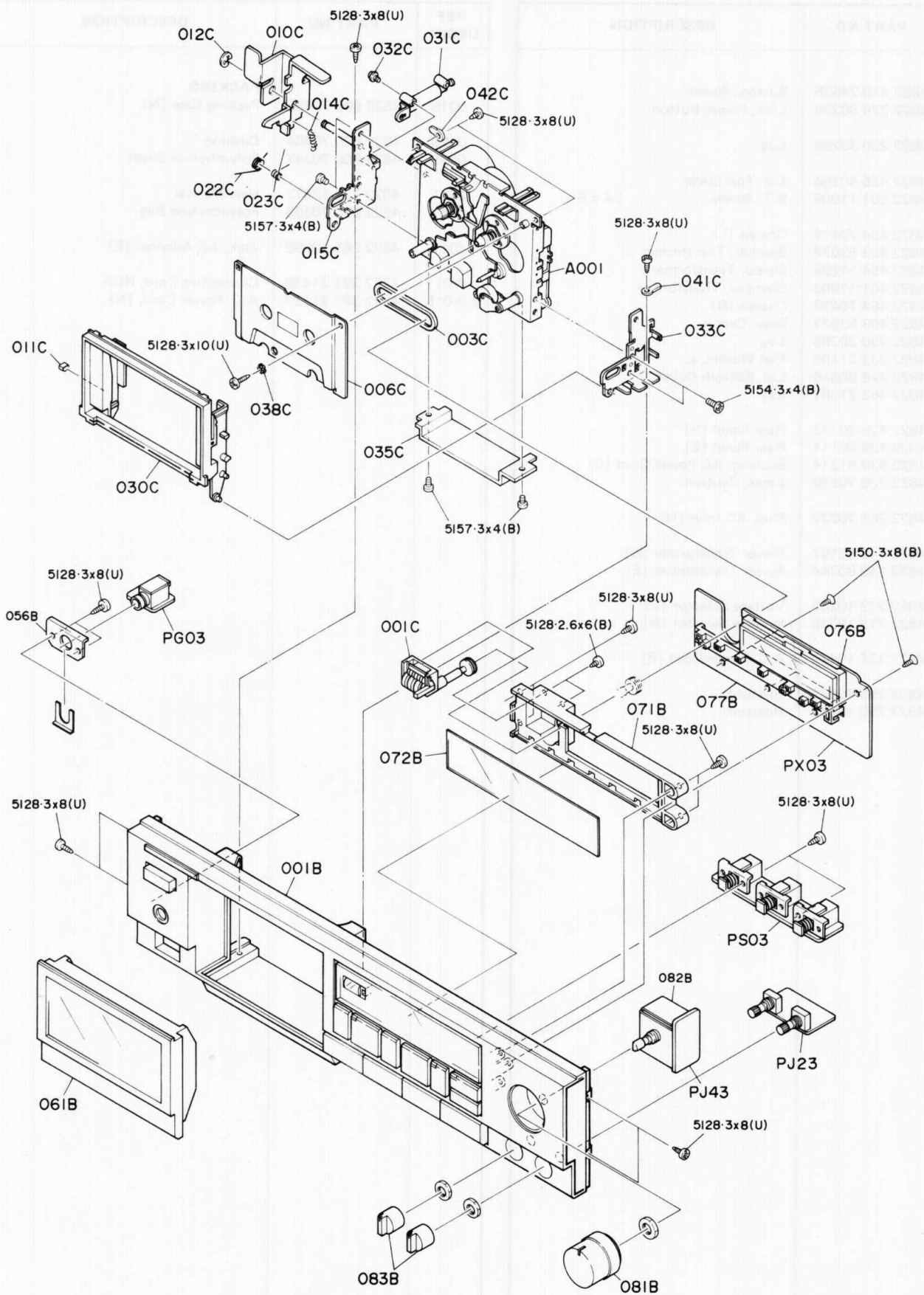
[P02-99] LID (TOP & BOTTOM COVER), REAR PANEL, GENERAL PARTS AND PACKING MATERIALS



REF. DESIG.	PART NO.	DESCRIPTION
005B	4822 410 24514	Button, Power; (Black) [N, E]
	4822 410 24509	Button, Power; (Gold) [E]
006B	4822 278 80239	Link, Power Button
008C	4822 290 30276	Lug
001D	4822 426 50851	Lid, Top Cover; (Black) [N, E]
	4822 426 50849	Lid, Top Cover; (Gold) [E]
002D	4822 502 12501	B.T. Screw B4 x 8
001G	4822 462 71361	Leg
003G	4822 464 70418	Chassis (R)
005G	4822 464 70419	Chassis (L)
007G	4822 426 60516	Lid, Bottom Cover
015G	4822 403 53073	Stay, Center
020G	4822 403 53074	Bracket, Transformer
022G	4822 401 11003	Clamper, Transformer
026G	4822 403 53075	Bracket, Power Switch
029G	4822 454 11298	Shield, Transformer
050G	4822 535 71081	Spacer, Eject Hook
060G	4822 600 70229	Label, Caution
901G	4822 426 20115	Rear Panel [N]
	4822 426 20116	Rear Panel [E]
905G	4822 532 51314	Bushing, AC Power Cord [E]
801K	4822 255 40532	Heatsink (Q801)
802K	4822 255 40532	Heatsink (Q802)
△ J093	4822 265 20222	Plug, AC Inlet [N]
△ L801	4822 146 40392	Power Transformer [N]
	4822 148 80744	Power Transformer [E]
△ S093	4822 272 10236	Voltage Selector [N]
	4822 272 10235	Voltage Selector [E]
△ W001	4822 321 10429	A.C. Power Cord [E]

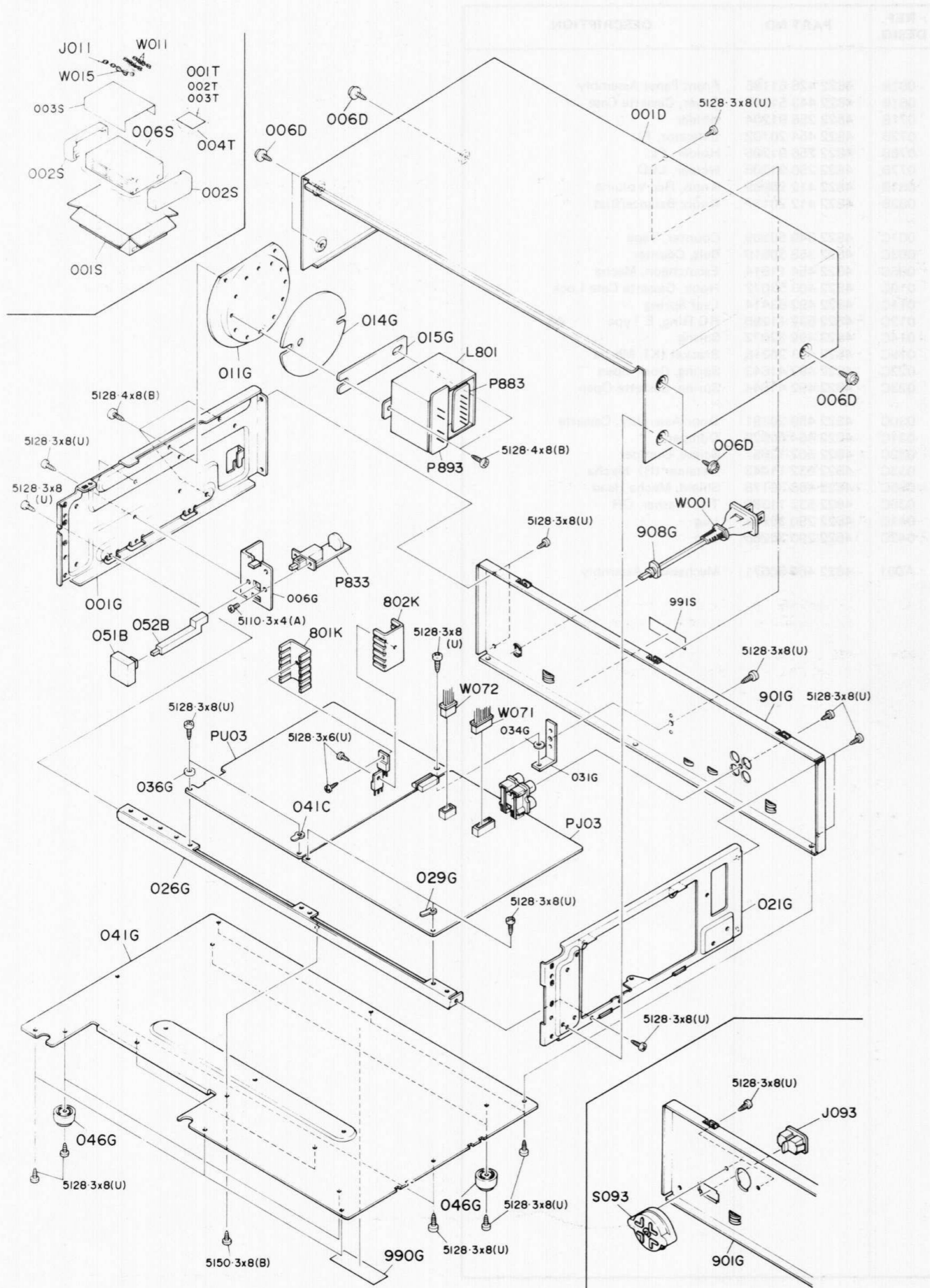
REF. DESIG.	PART NO.	DESCRIPTION
001S	4822 600 70469	PACKING Packing Case [N]
002S	4822 600 70464	Cushion
003S	4822 600 70347	Polyethylene Sheet
001T	4822 736 13573	User Manual
004T	4822 600 70363	Polyethylene Bag
J011	4822 265 10092	Jack, AC Adaptor [E]
W011	4822 321 21438	Connective Cord, RCA
△ W015	4822 321 21123	A.C. Power Cord [N]

[P01-99] FRONT PANEL AND ASSOCIATED MECHANISM FOR CASSETTE TAPE OPERATION



REF. DESIG.	PART NO.	DESCRIPTION
001B	4822 426 51186	Front Panel Assembly
061B	4822 443 51015	Cover, Cassette Case
071B	4822 256 91204	Holder
072B	4822 454 20702	Indicator, FL
076B	4822 256 91205	Holder, FL
077B	4822 256 91206	Holder, LED
081B	4822 412 20989	Knob, Rec Volume
083B	4822 412 20157	Knob, Balance/Bias
001C	4822 349 50309	Counter, Tape
003C	4822 358 30519	Belt, Counter
006C	4822 454 11914	Escutcheon, Mecha
010C	4822 403 53072	Hook, Cassette Case Lock
011C	4822 492 63414	Leaf Spring
012C	4822 532 11295	RG Ring, E Type $\phi 3$
014C	4822 492 32672	Spring
015C	4822 403 20218	Bracket (K), Mecha
022C	4822 492 41643	Spring, Door Open
023C	4822 492 41644	Spring, Cassette Open
030C	4822 459 20391	Door Assembly, Cassette
031C	4822 464 50528	Dumper
032C	4822 502 12557	Screw, Dumper
033C	4822 532 11443	Retainer (R) Mecha
035C	4822 466 30178	Shield, Mecha Head
038C	4822 532 11388	T.L. Washer, OR
041C	4822 290 30266	Lug
042C	4822 290 30266	Lug
A001	4822 464 50671	Mechanism Assembly

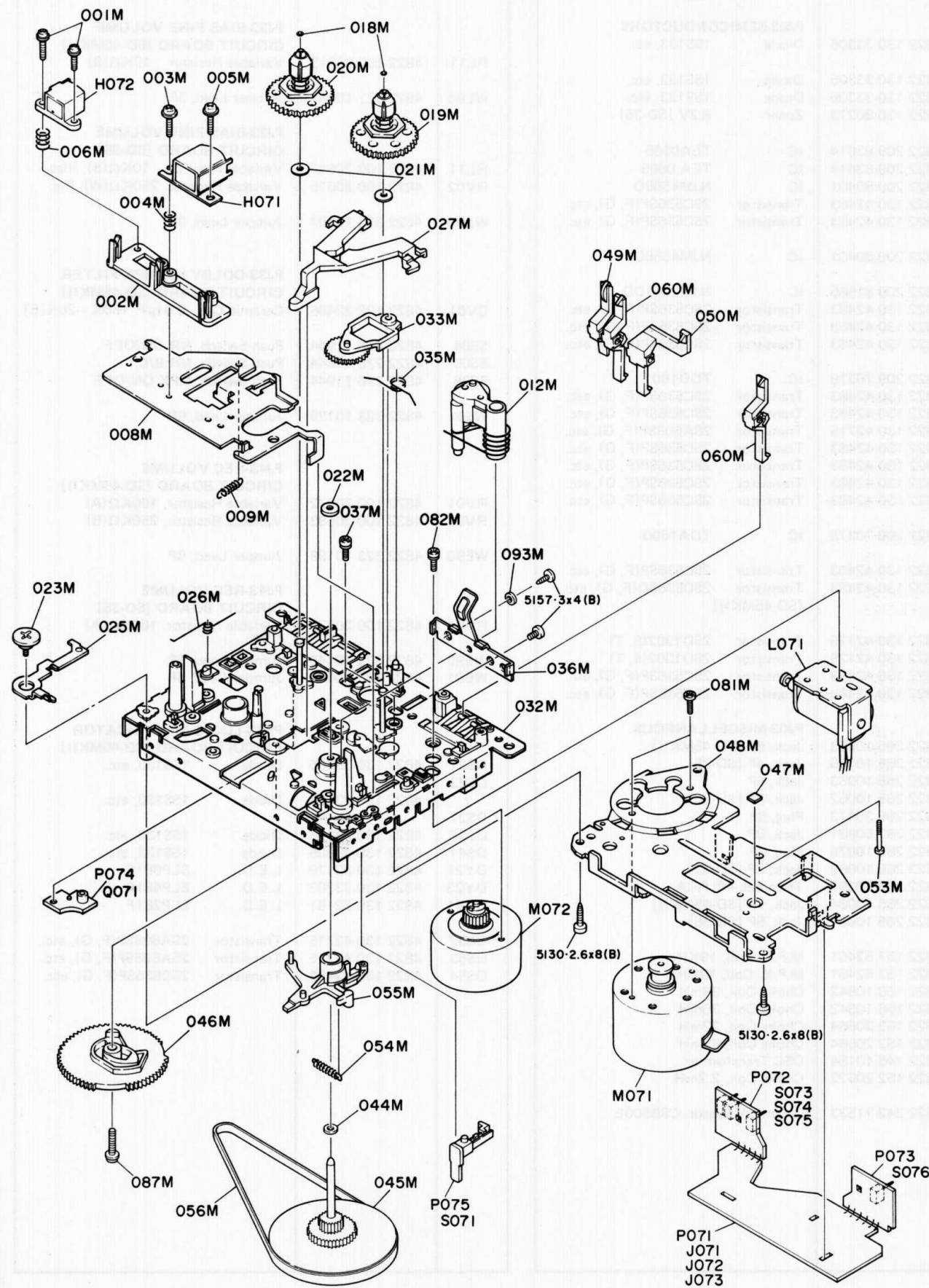
[P02-99] LID (TOP & BOTTOM COVER), REAL PANEL, GENERAL PARTS AND PACKING MATERIALS



REF. DESIG.	PART NO.	DESCRIPTION
051B	4822 410 24635	Button, Power
052B	4822 278 80239	Link, Power Button
041C	4822 290 30266	Lug
001D	4822 426 40366	Lid, Top Cover
006D	4822 501 11008	B.T. Screw B4 x 8
001G	4822 464 70419	Chassis (L)
011G	4822 403 53074	Bracket, Transformer
014G	4822 454 11298	Shield, Transformer
015G	4822 401 11003	Clamper, Transformer
021G	4822 464 70418	Chassis (R)
026G	4822 403 53073	Stay, Center
029G	4822 290 30266	Lug
036G	4822 532 21196	Flat Washer, L.
041G	4822 426 60516	Lid, Bottom Cover
046G	4822 462 71361	Leg
901G	4822 426 20113	Rear Panel [N]
	4822 426 20114	Rear Panel [E]
908G	4822 532 51314	Bushing, AC Power Cord [E]
990G	4822 600 70229	Label, Caution
△ J093	4822 265 20222	Plug, AC Inlet [N]
△ L801	4822 148 60167	Power Transformer [N]
	4822 148 80744	Power Transformer [E]
△ S093	4822 272 10235	Voltage Selector [E]
	4822 272 10236	Voltage Selector [N]
△ W001	4822 321 10429	A.C. Power Cord [E]
801K	4822 255 40532	Heatsink
802K	4822 255 40532	Heatsink

REF. DESIG.	PART NO.	DESCRIPTION
001S	4822 600 70468	PACKING Packing Case [N]
002S	4822 600 70464	Cushion
006S	4822 600 70347	Polyethylene Sheet
001T	4822 736 13572	User Manual
004T	4822 600 70363	Polyethylene Bag
J011	4822 265 10092	Jack, AC Adaptor [E]
W011	4822 321 21438	Connective Cord, RCA
△ W015	4822 321 21123	A.C. Power Cord, [N]

[P03-99] PARTS ASSEMBLED ON THE TOP AND REVERSE OF CHASSIS



REF. DESIG.	PART NO.	DESCRIPTION
001M	4822 502 12818	Screw, Erase Head
002M	4822 403 53076	Bracket, Head
003M	4822 502 12818	Screw, Azimus
004M	4822 492 51905	Spring, Azimus
005M	4822 502 12818	Screw, R/P Head
006M	4822 492 51905	Spring, Hight Adj.
008M	4822 464 50642	Chassis, Head
009M	4822 492 41677	Spring
012M	4822 403 40483	Pinch Roller S
018M	4822 535 71232	Spacer, Reel
019M	4822 528 10588	Table S, Supply Reel
020M	4822 528 10589	Table S, Take-up Reel
021M	4822 502 12167	Washer, Reel
022M	4822 535 71101	Spacer, Oil Fense
023M	4822 502 12922	Screw, Eject Lock Arm
025M	4822 403 40307	Arm, Eject Lock
026M	4822 492 41683	Spring, Eject Lock
027M	4822 403 52695	Lever, Hold
032M	4822 464 50683	Chassis S, Main
033M	4822 403 40306	Idler S
035M	4822 492 41684	Spring, Hold Lever
036M	4822 492 41689	Leaf Spring, Cassette Hold
037M	4822 502 12427	L. Washer Screw L2.6 x 6
044M	4822 532 11398	Washer, Flywheel
045M	4822 528 60323	Flywheel Assembly
046M	4822 522 32357	Gear
047M	4822 535 71233	Spacer
048M	4822 403 53224	Bracket
049M	4822 403 52696	Lever, Pack
050M	4822 403 52697	Lever, Metal
053M	4822 502 12923	Screw, Earth
054M	4822 492 32761	Spring, Play Arm
055M	4822 403 53223	Arm S, Play
056M	4822 358 20263	Belt, Main
060M	4822 403 52698	Lever, Anti Rec/CrO ₂
081M	4822 532 11594	L. Washer Screw L2.6 x 3
082M	4822 532 11594	L. Washer Screw L2.6 x 3
087M	4822 502 12892	Screw, Cam Gear
093M	4822 532 11593	Washer
L071	4822 157 53126	Solenoid Coil
M071	4822 361 60408	D.C. Motor, Main
M072	4822 361 60457	D.C. Motor, F/R
Q071	4822 130 10023	Photo Unit
S071	4822 277 21151	Mini Switch, Play
S073	4822 276 12258	Push Switch, Cassette
S074	4822 276 12258	Push Switch, Anti Rec
S075	4822 276 12258	Push Switch, Metal
S076	4822 276 12258	Push Switch, CrO ₂

REF. DESIG.	PART NO.	DESCRIPTION
H071	4822 249 10333	Head, Rec/Play
H072	4822 249 40194	Head, Erase
J071	4822 265 10064	Jack, 7P
J072	4822 265 10061	Jack, 5P
J073	4822 265 10062	Jack, 3P
L071	4822 157 53126	Solenoid Coil
M071	4822 361 60408	D.C. Motor, Main
M072	4822 361 60457	D.C. Motor, F/R
Q071	4822 130 10023	Photo Unit
S071	4822 277 21151	Mini Switch, Play
S073	4822 276 12258	Push Switch, Cassette
S074	4822 276 12258	Push Switch, Anti Rec
S075	4822 276 12258	Push Switch, Metal
S076	4822 276 12258	Push Switch, CrO ₂

13. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR

- R***: (1) GD05 --- 140, Carbon film fixed resistor, $\pm 5\%$, 1/4W
 R***: (2) GD05 --- 160, Carbon film fixed resistor, $\pm 5\%$, 1/6W

① --- Resistance value

Examples

① Resistance value

0.1Ω...001	10Ω...100	1kΩ...102	100kΩ...104
0.5Ω...005	18Ω...180	2.7kΩ...272	680kΩ...684
1Ω...010	100Ω...101	10kΩ...103	1MkΩ...105
6.8Ω...068	390Ω...391	22kΩ...223	4.7MkΩ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C***: CERAMIC CAP.

- (1) DD1 --- 370, Ceramic condenser
 Disc type
 Temp. coeff. P350 ~ N1000, 50V

①② --- Capacity value
 --- Tolerance

Examples

① Tolerance (Capacity deviation)

$\pm 0.25\text{pF}$...0	$\pm 0.5\text{pF}$...1	$\pm 5\%$...5
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* Tolerance of COMMON PARTS handled here are as follows:

0.5pF ~ 5pF... $\pm 0.25\text{pF}$
6pF ~ 10pF... $\pm 0.5\text{pF}$
12pF ~ 560pF... $\pm 5\%$

② Capacity value

0.5pF...005	3pF...030	100pF...101
1pF...010	10pF...100	220pF...221
1.5pF...015	47pF...470	560pF...561

C***: CERAMIC CAP.

- (1) DK16 --- 300, High dielectric constant ceramic condenser
 Disc type
 Temp. chara. 2B4, 50V

① --- Capacity value

Example

② Capacity value

100pF...101	1000pF...102	10000pF...103
470pF...471	2200pF...222	

C***: ELECTROLY CAP. (E), FILM CAP. (F)

- (1) EA --- 10, Electrolytic condenser
 One-way lead type, Tolerance $\pm 20\%$

①② --- Dielectric strength
 --- Capacity value

Examples

① Capacity value

0.1μF...104	4.7μF...475	100μF...107
0.33μF...334	10μF...106	330μF...337
1μF...105	22μF...226	1100μF...108
		2200μF...228

② Working voltage

6.3V...006	25V...025
10V...010	35V...035
16V...016	50V...050

- (2) DF15 --- 350, Plastic film condenser
 One-way type, Mylar $\pm 5\%$ 50V

① --- Capacity value

Examples

① Capacity value

0.001μF (1000pF)...	102	0.1μF...	104
0.0018μF	182	0.56μF	564
0.01μF	103	1μF	105
0.015μF	153		

REF. DESIG.	PART NO.	DESCRIPTION
CG01	4822 122 40491	PG03-HEADPHONE JACK CIRCUIT BOARD [SD-45MKII/SD-35] Ceramic Cap. 0.022μF +80% -20%
JG01	4822 267 30617	
	4822 264 10132	
WG90	4822 323 10081	Jack, Headphone; (Black) [N, E]
	4822 323 10142	Jack, Headphone; (Gold) (SD-45MKII) [E]
		Jumper Lead, 3P [SD-45MKII]
		Jumper Lead, 3P [SD-35]
		PJ03-AUDIO MAIN CIRCUIT BOARD [SD-45MKII/SD-35]
		PJ03-CAPACITORS
C617	4822 124 41188	Elect 0.68μF 50V
C618	4822 124 41188	Elect 0.68μF 50V
C627	4822 124 41188	Elect 0.68μF 50V
C628	4822 124 41188	Elect 0.68μF 50V
C631	4822 124 22039	Elect 220μF 16V
C632	4822 124 22039	Elect 220μF 16V
CG23	4822 122 40491	Ceramic 0.022μF +80% -20%
CJ31	4822 121 43005	Film 820pF $\pm 5\%$
CJ32	4822 121 43005	Film 820pF $\pm 5\%$
CJ41	4822 124 90363	Elect 220μF 10V
CJ42	4822 124 90363	Elect 220μF 10V
CJ43	4822 124 90357	Elect 2.2μF 50V
CJ44	4822 124 90357	Elect 2.2μF 50V
CJ45	4822 124 90371	Elect 470μF 10V
CJ46	4822 124 90371	Elect 470μF 10V
CK11	4822 122 32486	Ceramic 0.01μF +80% -20%
CL01	4822 121 42791	Film 4700pF $\pm 5\%$
CL03	4822 121 42344	Film 220pF $\pm 5\%$
CL04	4822 121 42344	Film 220pF $\pm 5\%$
CL21	4822 122 32486	Ceramic 0.01μF +80% -20%
CL22	4822 122 32486	Ceramic 0.01μF +80% -20%
CW01	4822 122 40491	Ceramic 0.022μF +80% -20%
CW05	4822 124 22274	Elect 4.7μF 50V
CW06	4822 124 22274	Elect 4.7μF 50V
CW07	4822 124 22274	Elect 4.7μF 50V
CW08	4822 124 22274	Elect 4.7μF 50V
CW11	4822 124 22274	Elect 4.7μF 50V
CW12	4822 124 22274	Elect 4.7μF 50V
CW13	4822 122 40491	Ceramic 0.022μF +80% -20%
		PJ03-RESISTORS
RJ47	4822 100 11041	10KΩ, Trimming
RJ48	4822 100 11041	10KΩ, Trimming
RK01	4822 100 20545	22KΩ, Trimming
RK02	4822 100 20545	22KΩ, Trimming
RL01	4822 100 11042	47KΩ, Trimming
RL02	4822 100 11042	47KΩ, Trimming
RL05	4822 100 20545	22KΩ, Trimming
RL06	4822 100 20545	22KΩ, Trimming

REF. DESIG.	PART NO.	DESCRIPTION
DK11	4822 130 33305	PJ03-SEMICONDUCTORS Diode 1SS133, etc.
DS46	4822 130 33305	Diode 1SS133, etc.
DS61	4822 130 33305	Diode 1SS133, etc.
DY04	4822 130 80273	Zener 8.2V [SD-35]
Q601	4822 209 83614	IC TEA0665
Q602	4822 209 83614	IC TEA 0665
Q631	4822 209 80401	IC NJM4558D
Q651	4822 130 42483	Transistor 2SC536SP(F, G), etc.
Q652	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QG21	4822 209 80401	IC NJM4558D
QJ31	4822 209 81565	IC NJM2041DD
QJ41	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QJ42	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QJ48	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QK01	4822 209 70379	IC TDD1601
QK11	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QK12	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QK13	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QK14	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QK15	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QK16	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QK17	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QL01	4822 209 70378	IC TDA1600
QS25	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QS31	4822 130 42483	Transistor 2SC536SD(F, G), etc. [SD-45MKII]
QW11	4822 130 42125	Transistor 2SD1302(S, T)
QW12	4822 130 42125	Transistor 2SD1302(S, T)
QW13	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QW14	4822 130 42483	Transistor 2SC536SP(F, G), etc.
J691	4822 265 10063	PJ03-MISCELLANEOUS Jack, 6P [SD-45MKII]
	4822 265 10105	Jack, 4P [SD-35]
JE90	4822 265 10063	Jack, 6P
JG90	4822 265 10062	Jack, 3P [SD-35]
JJ01	4822 265 30473	Plug, 6P
JJ90	4822 267 50681	Jack, 9P
JL01	4822 265 10078	Plug, 3P
JL90	4822 265 10062	Jack, 3P [SD-35]
JW01	4822 265 30397	Terminal, 4P; RCA
JX91	4822 265 10064	Jack, 7P [SD-45MKII]
JX92	4822 265 10061	Jack, 5P [SD-35]
L601	4822 157 52461	M.P.X. Coil, 19KHz
L602	4822 157 52461	M.P.X. Coil, 19KHz
L603	4822 156 10842	Choke Coil, 36mH
L604	4822 156 10842	Choke Coil, 36mH
LK01	4822 152 20564	Choke Coil, 22mH
LK02	4822 152 20564	Choke Coil, 22mH
LL01	4822 146 10184	OSC Transformer
LL21	4822 152 20622	Choke Coil, 2.2mH
XK01	4822 242 71533	Ceramic Vibrator, CSB500E

REF. DESIG.	PART NO.	DESCRIPTION
RL11	4822 100 20613	PJ23-BIAS FINE VOLUME CIRCUIT BOARD [SD-45MKII] Variable Resistor 10KΩ(B)
WL90	4822 323 10081	Jumper Lead, 3P
		PJ23-BIAS FINE VOLUME CIRCUIT BOARD [SD-35] Variable Resistor 10KΩ(B), Bias Variable Resistor 250KΩ(W), Rec
RL11	4822 100 20613	
RV02	4822 100 20615	
WL90	4822 323 10107	Jumper Lead, 3P
		PJ33-DOLBY NR/MPX FILTER CIRCUIT BOARD [SD-45MKII] Ceramic Cap. 0.01μF +80% -20% [E]
CV01	4822 122 32486	
SS04	4822 276 11944	Push Switch, NR ON/OFF
SS05	4822 276 11944	Push Switch, NR B/C
SS06	4822 276 11944	Push Switch, MPX ON/OFF
W691	4822 323 10129	Jumper Lead, 6P
		PJ43-REC VOLUME CIRCUIT BOARD [SD-45MKII] Variable Resistor, 100KΩ(A) Variable Resistor, 250KΩ(B)
RV01	4822 100 20272	
RV02	4822 100 20583	
WE90	4822 323 10198	Jumper Lead, 6P
		PJ43-REC VOLUME CIRCUIT BOARD [SD-35] Variable Resistor 100KΩ(A)
RV01	4822 100 20272	
WE90	4822 323 10146	Jumper Lead, 6P
WE91	4822 323 10086	Jumper Lead, 4P
		PS03-LOGIC SW/INDICATOR CIRCUIT BOARD [SD-45MKII] Diode 1SS133, etc.
DS21	4822 130 33305	
DS23	4822 130 33305	Diode 1SS133, etc.
DS27	4822 130 33305	Diode 1SS133, etc.
DS36	4822 130 33305	Diode 1SS133, etc.
DS41	4822 130 33305	Diode 1SS133, etc.
DY21	4822 130 32179	L.E.D. SLP981C
DY23	4822 130 33203	L.E.D. SLP481C
DY41	4822 130 32181	L.E.D. SLP281F
QS52	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QS53	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QS54	4822 130 42483	Transistor 2SC536SP(F, G), etc.

REF. DESIG.	PART NO.	DESCRIPTION
SS21	4822 276 11559	Push Switch, Rec
SS23	4822 276 11559	Push Switch, Rec
SS27		
SS36	4822 276 11559	Push Switch, Memory
SS37	4822 276 11559	Push Switch, Reset
SS41	4822 276 11559	Push Switch, Play
WY02	4822 323 10272	Jumper Lead, 8P
WY03	4822 323 10272	Jumper Lead, 8P
		PS03-NR ON/OFF/MPX CIRCUIT BOARD [SD-35]
SS05	4822 276 12219	Push Switch, NR ON/OFF
SS06	4822 276 12219	Push Switch, NR B/C
SS12	4822 276 12219	Push Switch, MPX Filter
W691	4822 323 10087	Jumper Lead, 4P
WS03	4822 323 10087	Jumper Lead, 4P
		PU03-LOGIC MAIN CIRCUIT BOARD [SD-45MKII/SD-35]
		PU03-CAPACITORS
CM81	4822 122 40491	Ceramic 0.022 μ F +80% -20%
CM82	4822 122 32486	Ceramic 0.01 μ F +80% -20%
CU04	4822 122 32486	Ceramic 0.01 μ F +80% -20%
CU21	4822 122 32486	Ceramic 0.01 μ F +80% -20%
C801	4822 124 41313	Elect 1000 μ F 35V
C806	4822 124 22267	Elect 220 μ F 16V
C809	4822 122 32486	Ceramic 0.01 μ F +80% -20%
C810	4822 122 32486	Ceramic 0.01 μ F +80% -20%
		PU03-RESISTORS
GU03	4822 111 91276	10K Ω x6 \pm 5% 1/5W, Allay
Δ R801	4822 116 60309	2.2 Ω \pm 5% 1/4W, Fusible [SD-45MKII]
Δ R802	4822 111 90724	330 Ω \pm 5% 1/4W [SD-45MKII]
Δ R805	4822 116 60307	1 Ω \pm 5% 1/4W, Fusible
Δ R806	4822 116 60306	1 Ω \pm 5% 1/4W, Fusible [SD-45MKII]
Δ R807	4822 116 21086	1 Ω \pm 5% 1/4W, Fusible
		PU03-SEMICONDUCTORS
DM01	4822 130 32508	Diode DSF10C, etc.
DM02	4822 130 32508	Diode DSF10C, etc.
DM31	4822 130 33759	Zener RD4.7JB2
DM81	4822 130 33758	Zener RD4.7JB2
DU06	4822 130 33305	Diode 1SS133, etc.
DU11	4822 130 33305	Diode 1SS133, etc.
DU20	4822 130 33305	Diode 1SS133, etc.
DU21	4822 130 33305	Diode 1SS133, etc.
DU22	4822 130 33305	Diode 1SS133, etc.
DU51	4822 130 33759	Zener RD4.7JB2
DU52	4822 130 33305	Diode 1SS133, etc.
DU53	4822 130 33305	Diode 1SS133, etc. [SD-45MKII]
DU65	4822 130 33305	Diode 1SS133, etc.
DU66	4822 130 33305	Diode 1SS133, etc.
DU71	4822 130 33305	Diode 1SS133, etc.
DU96	4822 130 33305	Diode 1SS133, etc.
DU97	4822 130 33305	Diode 1SS133, etc.
DU98	4822 130 33305	Diode 1SS133, etc.

REF. DESIG.	PART NO.	DESCRIPTION
Δ D801	4822 130 32816	Diode 1SR35-200A
	4822 130 50314	Diode RB-152 (SD-35) [N]
Δ D802	4822 130 32816	Diode 1SR35-200A
Δ D803	4822 130 32816	Diode 1SR35-200A [SD-45MKII]
Δ D804	4822 130 32816	Diode 1SR35-200A [SD-45MKII]
Δ D807	4822 130 32508	Diode DSF10C, etc.
Δ D808	4822 130 32508	Diode DSF10C, etc.
Δ D809	4822 130 32508	Diode DSF10C, etc.
Δ D810	4822 130 33305	Diode 1SS133, etc. [SD-45MKII]
Δ D811	4822 130 80115	Zener RD15JB1 [SD-45MKII]
Δ D812	4822 130 33759	Zener RD4.7JB2 [SD-45MKII]
QM01	4822 130 60174	Transistor 2SD1379
QM02	4822 130 60174	Transistor 2SD1379
QM31	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QM32	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QM33	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QM34	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QM81	4822 209 82059	IC BA6019
QM82	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QM83	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QM84	4822 130 42483	Transistor 2SC536SP(F, G), etc. [SD-45MKII]
QU01	4822 209 83812	IC LM640202A
QU20	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QU21	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU51	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU54	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU55	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QU56	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU57	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU62	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU71	4822 130 30857	IC BA222
QU72	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QU73	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU92	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU93	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QU94	4822 130 42483	Transistor 2SC536SP(F, G), etc.
Q801	4822 209 83821	IC NJM78M06A
Q802	4822 209 82829	IC NJM78M15A
Q803	4822 130 60496	Transistor 2SB891(Q, R) [SD-45MKII]
JU90	4822 265 40602	Plug, 9P
JU92	4822 265 10062	Jack, 3P [SD-45MKII]
JU93	4822 265 10062	Jack, 3P [SD-35]
	4822 265 10063	Jack, 6P [SD-45MKII]
JY02	4822 265 10059	Jack, 8P
JY03	4822 265 10059	Jack, 8P [SD-45MKII]
	4822 265 10105	Jack, 4P [SD-35]
WM91	4822 323 10135	Jumper Lead, 7P
WM92	4822 323 10113	Jumper Lead, 5P
WM93	4822 323 10077	Jumper Lead, 3P
WR01	4822 323 10057	Jumper Lead, 6P
XU01	4822 242 71405	Ceramic Vibrator, CSG800K

14. TECHNICAL SPECIFICATION

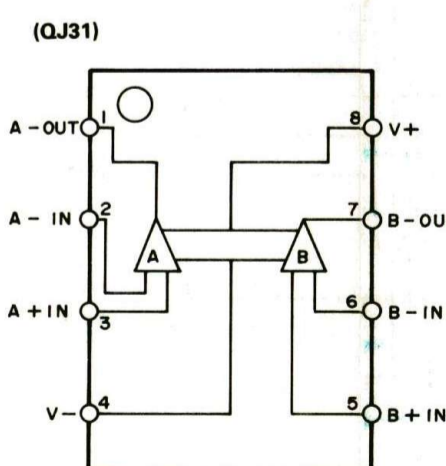
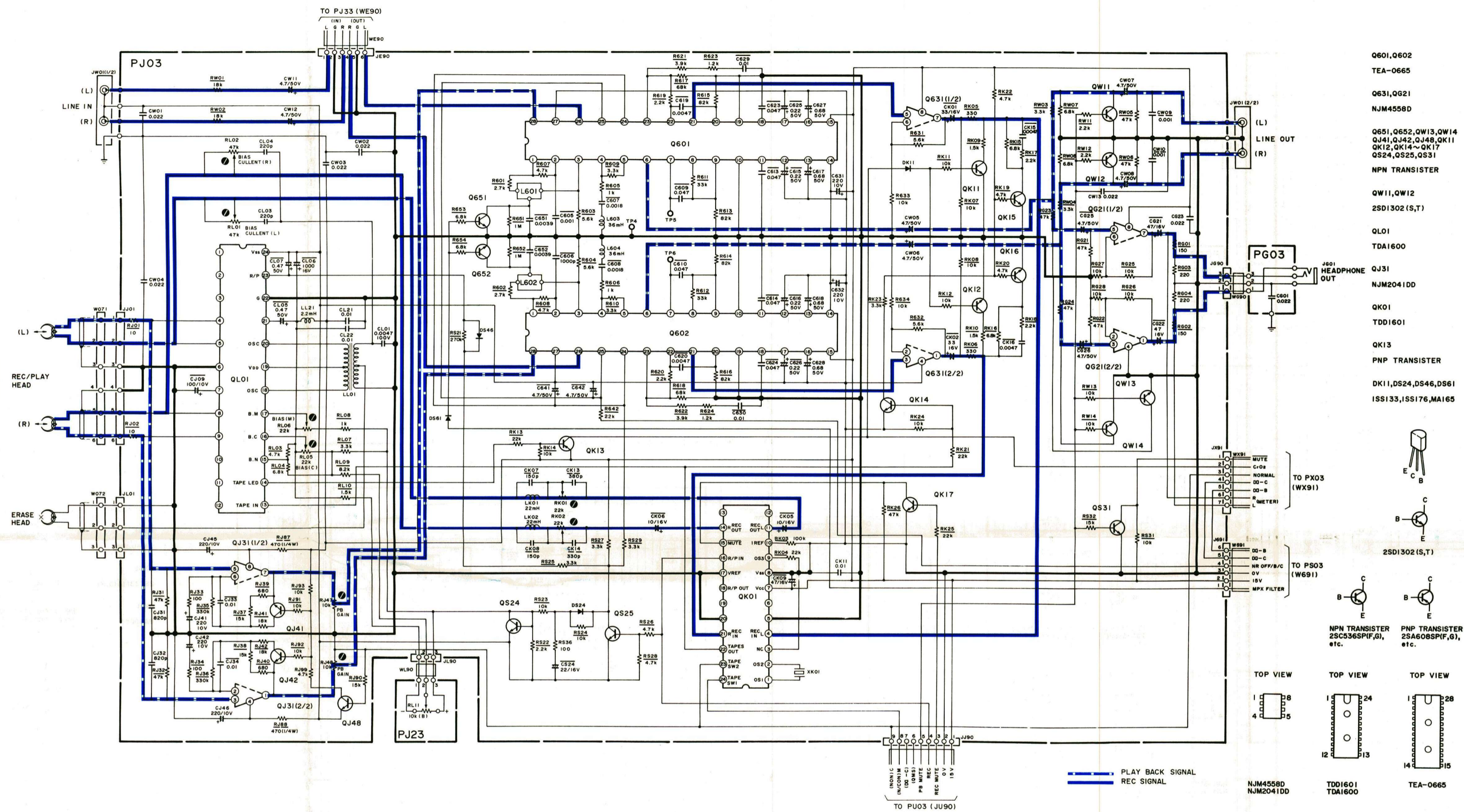
REF. DESIG.	PART NO.	DESCRIPTION
		PX03-FL METER/COUNTER DRIVER CIRCUIT BOARD [SD-45MKII]
		PX03-CAPACITORS
CX15	4822 122 40491	Ceramic 0.022μF +80% -20%
CX16	4822 122 40491	Ceramic 0.022μF +80% -20%
CX17	4822 122 32486	Ceramic 0.01μF +80% -20%
CX32	5322 122 31626	Ceramic 100pF ±5%
		PX03-RESISTORS
RX13	4822 100 20545	22KΩ, Trimming
RX14	4822 100 20545	22KΩ, Trimming
RX19	4822 111 90727	220Ω ±5% 1/4W
GX01	4822 111 90956	100KΩx8, Alloy
GX02	4822 111 90608	100KΩx12, Alloy
		PX03-SEMICONDUCTORS
DX01	4822 130 33305	Diode 1SS133, etc.
DX02	4822 130 80115	Zener RD15JB1
DX03	4822 130 80116	Zener 24V
DX05	4822 130 33759	Zener RD4.7JB2
DX06	4822 130 33305	Diode 1SS133, etc.
DX07	4822 130 33305	Diode 1SS133, etc.
DX11	4822 130 32508	Diode DSF10C, etc.
DX32	4822 130 33305	Diode 1SS133, etc.
QX01	4822 130 60494	IC BA6805A
QX03	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QX04	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QX05	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QX06	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QX31	4822 209 83731	IC TM4028A
QX32	4822 130 60497	Transistor 2SC3311A(Q, R)
		PX03-MISCELLANEOUS
WU92	4822 323 10077	Jumper Lead, 3P
WU93	4822 323 10058	Jumper Lead, 6P
WX91	4822 323 10059	Jumper Lead, 7P
		PX03-FL METER/KEY SW/LED CIRCUIT BOARD [SD-35]
		PX03-RESISTORS
RX01	4822 100 11042	47KΩ, Trimming
RX02	4822 100 11042	47KΩ, Trimming
RX11	4822 116 60444	18Ω ±5% 1/6W, Metal [E]
		PX03-SEMICONDUCTORS
DS21	4822 130 33305	Diode 1SS133, etc.
DS23	4822 130 33305	Diode 1SS133, etc.
DS27	4822 130 33305	Diode 1SS133, etc.
DS41	4822 130 33305	Diode 1SS133, etc.
DY01	4822 130 80326	L.E.D. LT3D8B
DY02	4822 130 80326	L.E.D. LT3D8B
DY03	4822 130 80326	L.E.D. LT3D8B
DY06	4822 130 80326	L.E.D. LT3D8B
DY07	4822 130 80326	L.E.D. LT3D8B
DY12	4822 130 80326	L.E.D. LT3D8B
DY21	4822 130 80326	L.E.D. LT3D8B
DY23	4822 130 80325	L.E.D. LT3H8D
DY41	4822 130 80327	L.E.D. LT3G8B

REF. DESIG.	PART NO.	DESCRIPTION
QS52	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QS53	4822 130 42715	Transistor 2SA608SP(F, G), etc.
QS54	4822 130 42483	Transistor 2SC536SP(F, G), etc.
QX01	4822 209 70049	IC BA6146
QX02	4822 209 70049	IC BA6146
		PX03-MISCELLANEOUS
SS21	4822 276 11559	Push Switch, Rec
SS23	4822 276 11559	Push Switch, Rec
SS27	4822 276 11559	Push Switch, Play
SS41	4822 276 11559	Push Switch, Play
VX01	4822 130 90434	Display Unit
WU93	4822 323 10224	Jumper Lead, 3P
WX92	4822 323 10113	Jumper Lead, 5P
WY02	4822 323 10136	Jumper Lead, 8P
WY03	4822 323 10087	Jumper Lead, 4P
		PX13-FL METER CIRCUIT BOARD [SD-45MKII]
VX01	4822 130 90401	Display Unit
		P833-POWER SWITCH CIRCUIT BOARD [SD-45MKII/SD-35]
△C851	4822 122 40305	Ceramic Cap. 0.01μF 400V
△S851	4822 276 11141	Push Switch, Power
		P883-PT 2ND CONNECT CIRCUIT BOARD [SD-35]
J801	4822 265 10063	Jack, 6P

(W01-99)	Assembly and Wiring
(T01-99)	Adjustment
(X01-00)	Correction

NOTE ON SAFETY:
SYMBOL Δ FIRE OR ELECTRICAL SHOCK HAZARD.
ONLY ORIGINAL PARTS SHOULD BE USED TO REPLACE ANY PART MARKED WITH SYMBOL Δ. ANY OTHER COMPONENT SUBSTITUTION (OTHER THAN ORIGINAL TYPE), MAY INCREASE RISK OF FIRE OR ELECTRICAL SHOCK HAZARD.

	MODEL SD-35	MODEL SD-45II
Style	Front load	Front load
Tape Drive System	Single Capstan Drive	Single Capstan Drive
Cartridge	Philips type compact cassette	Philips type compact cassette
Track System	Compatible Stereo 4-track 2-channel	Compatible Stereo 4-track 2-channel
Tape Speed	4.75 cm/sec.	4.75 cm/sec.
Heads	2 Head System	2 Head System
Composition	Rec/Play: Super Hard Metal Alloy	Rec/Play: Super Hard Metal Alloy
Erase	Dual Gap Ferrite	Dual Gap Ferrite
Motor	2 Motor System	2 Motor System
Capstan	DC Servo Motor	DC Servo Motor
Reel	DC Motor	DC Motor
Overall Frequency Response at -20 dB		
Normal Tape	20 Hz - 17 kHz	20 Hz - 18 kHz
CrO ₂ Tape	20 Hz - 18 kHz	20 Hz - 19 kHz
Metal Tape	20 Hz - 19 kHz	20 Hz - 20 kHz
Signal-to-Noise Ratio:		
Dolby B/C (ON)	65/74 dB	68/75 dB
Dolby (OFF)	57 dB	59 dB
Wow and Flutter		
DIN WTD	0.09%	0.09%
Outputs		
Line Level/Impedance	500 mV/3.3 k ohms	500 mV/3.3k ohms
Headphone Level/Impedance	50 mV/100 ohms	50 mV/100 ohms
Input (Level at 0 VU)		
Line Sensitivity/Impedance	70 mV/40 k ohms	70 mV/40 k ohms
Fast Rewind Time	95 sec. (C-60)	95 sec. (C-60)
Fast Forward Time	95 sec. (C-60)	95 sec. (C-60)
Power Requirements		
N.T. and A	220/240 V AC, 50/60 Hz	220/240 V AC, 50/60 Hz
E version	110/120/220/240V AC, 50/60 Hz	110/120/220/240V AC, 50/60 Hz
Power Consumption at Rated Output, both Channels Operating	20 W	20 W
Dimensions		
Panel Width	420 mm	420 mm
Panel Height	100 mm	100 mm
Depth	260 mm	260 mm
Weight	4.3 kg	4.4 kg



Components and wiring are subject to change for modification without notice.

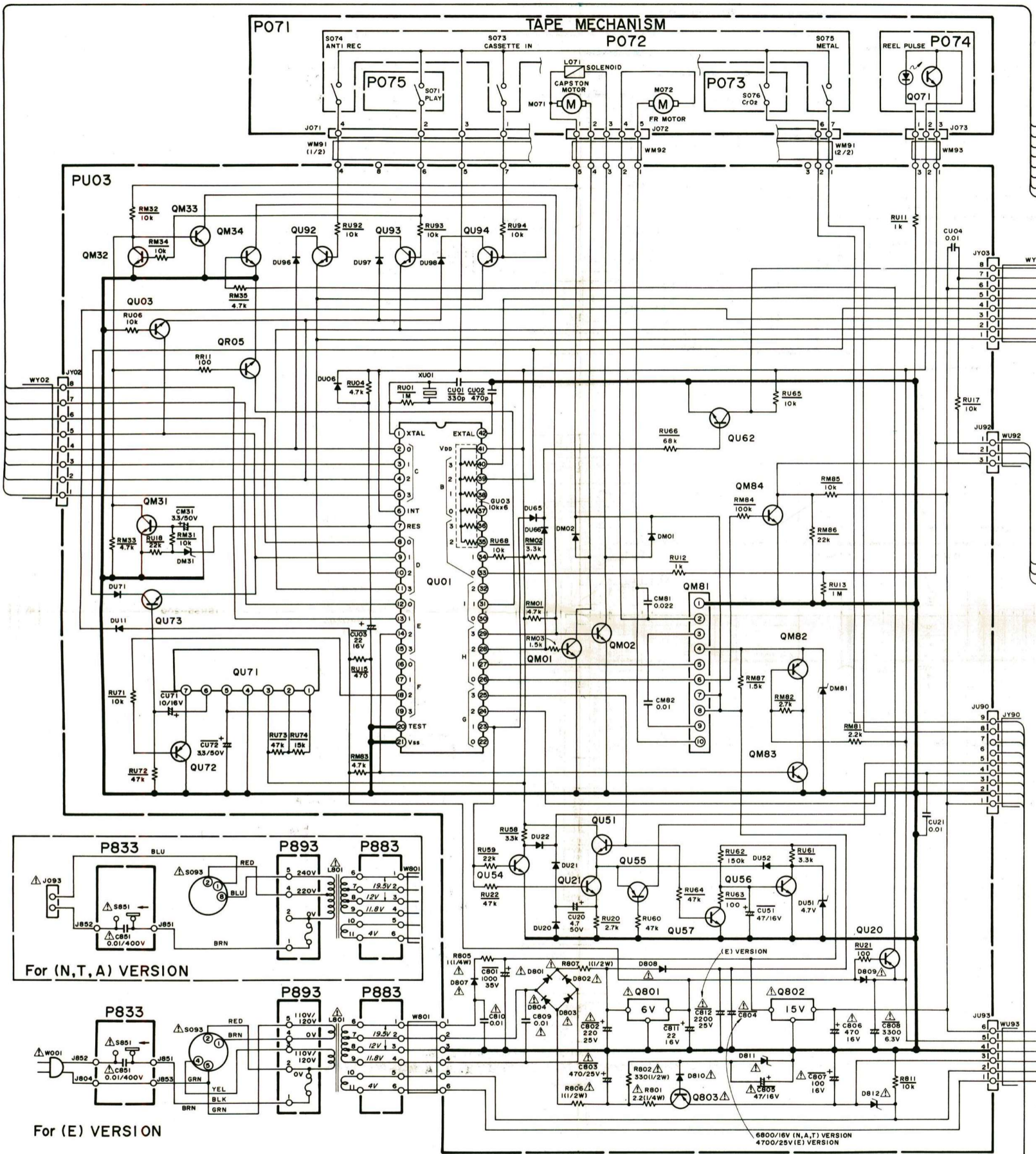
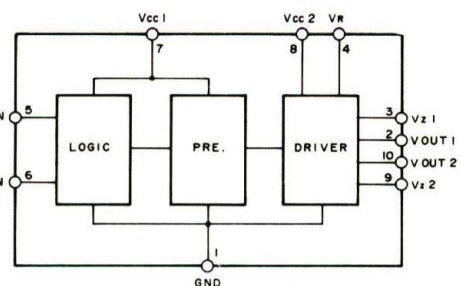
NOTE ON SAFETY:
 Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

"SERVICE INFORMATION IS FOR USE BY QUALIFIED PERSONNEL ONLY - ANY MISADJUSTMENT OR MISALIGNMENT MAY BE TREATED AS A NON-WARRANTY REPAIR BY ANY MARANTZ SERVICE CENTER."

- Kind of Common Parts**
- RESISTOR**
 R*** (1) GD05 -- 140, Carbon film fixed resistor, $\pm 5\%$ 1/4W
 R*** (2) GD05 -- 160, Carbon film fixed resistor, $\pm 5\%$ 1/6W
 C*** : CERAMIC CAP.
 (1) DD1 --- 370, Ceramic condenser, disc type (titan condenser) Temp. coeff. P350 ~ N1000 50V
 C*** : CERAMIC CAP.
 (1) DK16 -- 300, High dielectric constant ceramic condenser, disc type (titan variable) Temp. chara. 2B4 50V
 C*** : ELECTROLY CAP. (---)/FILM CAP. (---)
 (1) EA ---- 10, Electrolytic condenser, one-way lead type, tolerance $\pm 20\%$
 (2) DF15 -- 350, Plastic film condenser, one-way type, Mylar, $\pm 5\%$ 50V

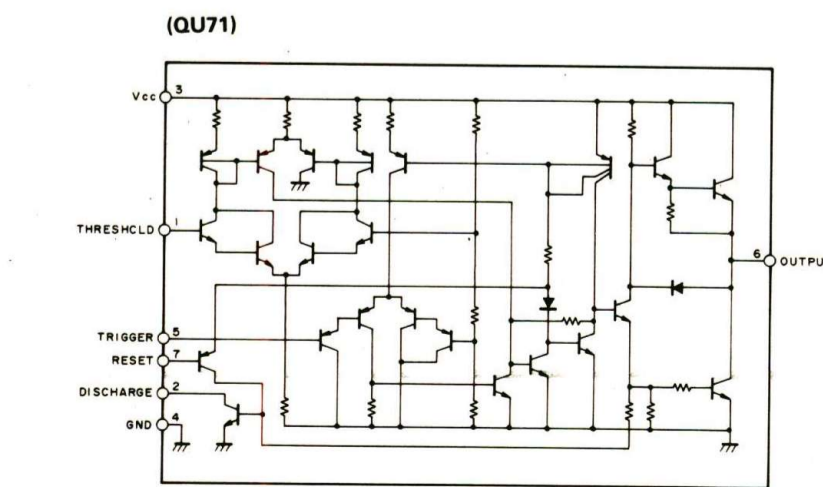
* In case of ordering the common parts, please establish the correct parts number of 10 figures by the procedure "ASSIGNMENT OF COMMON PARTS CODES"

(QM81)



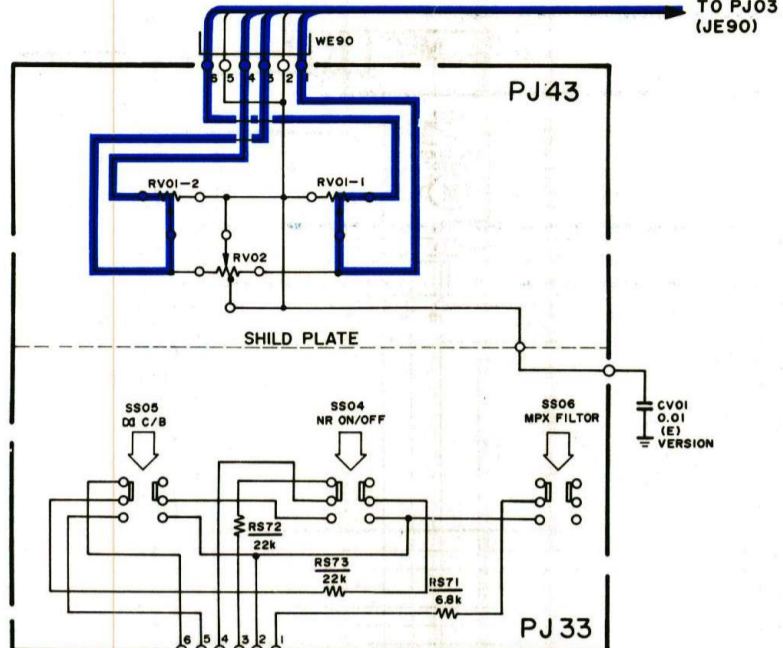
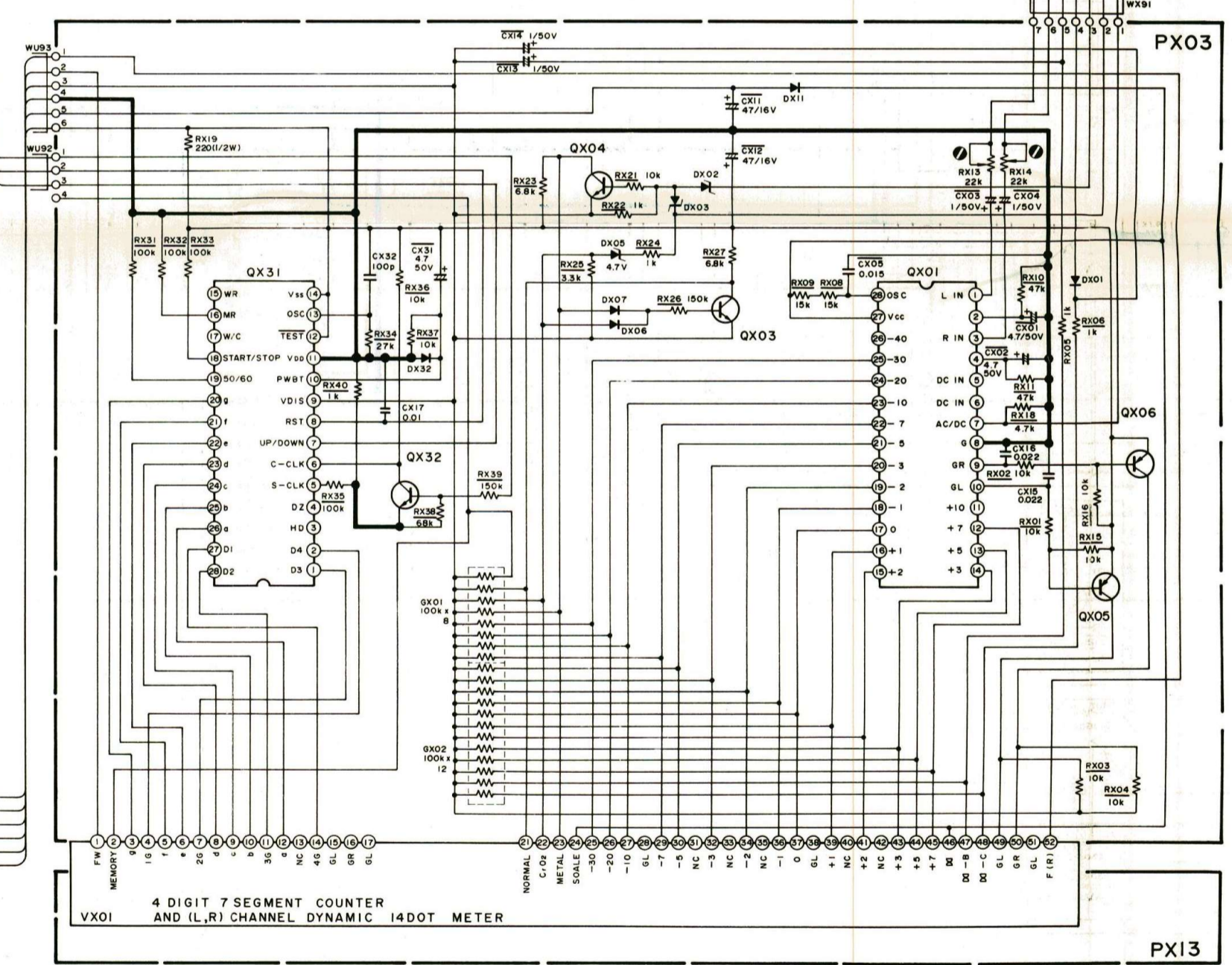
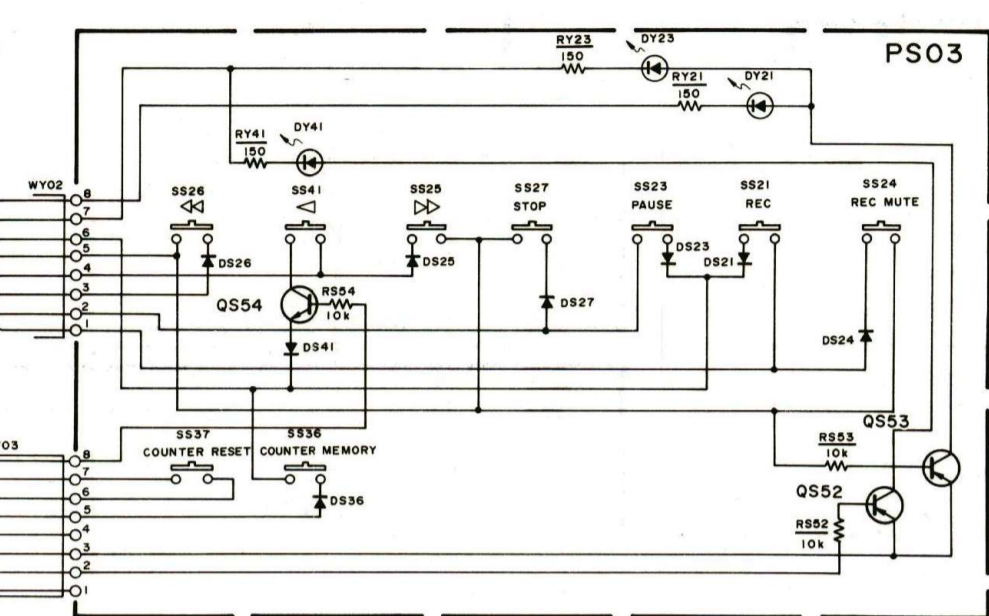
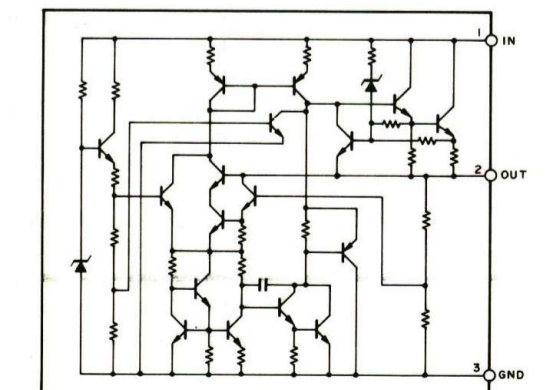
For (N,T,A) VERSION

For (E) VERSION



MZ 1681

(Q801, Q802)



Q071 PHOTO UNIT
 QM82, QU72, QX05, QX06 PNP TRANSISTOR
 Q554, Q551, Q554, Q556 QU57, QM31 ~ QM34 QU21, QU52 ~ QU54 QM53, QM54, QU62, QU73 QX03, QX04

DY21 SLP981C (RED)
 DY23 SLP481C (ORG)
 NPN TRANSISTOR
 QM01, QM02 SLP281F (GRN)
 2SD1379 DM01, DM02, D807 ~ D809 QU01 L M640202A

Q801 NMJ78M06A
 Q802 NMJ78M15A
 Q803 2SB891 (Q,R)

Q804 2SB891 (Q,R)
 QX31 TM4028A
 QX32 2SC3311A (Q,R)

QX01 BA6805A
 QX02 2SC3311 (Q,R)
 QX03 2SC3311 (Q,R)
 QX04 2SC3311 (Q,R)
 QX05 2SC3311 (Q,R)
 QX06 2SC3311 (Q,R)

QX07 2SC3311 (Q,R)
 QX08 2SC3311 (Q,R)
 QX09 2SC3311 (Q,R)
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 QX79 2SC3311 (Q,R)
 QX80 2SC3311 (Q,R)

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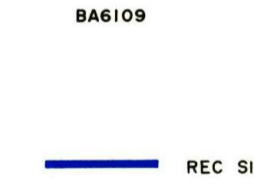
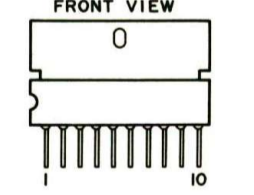
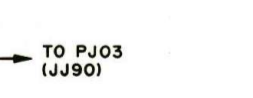
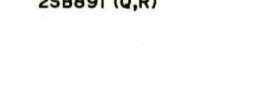
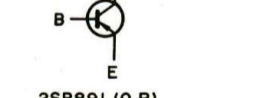
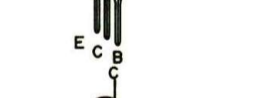
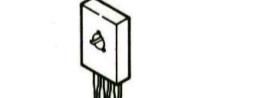
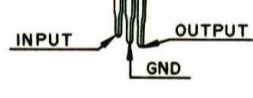
TOP VIEW

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REC SIGNAL



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