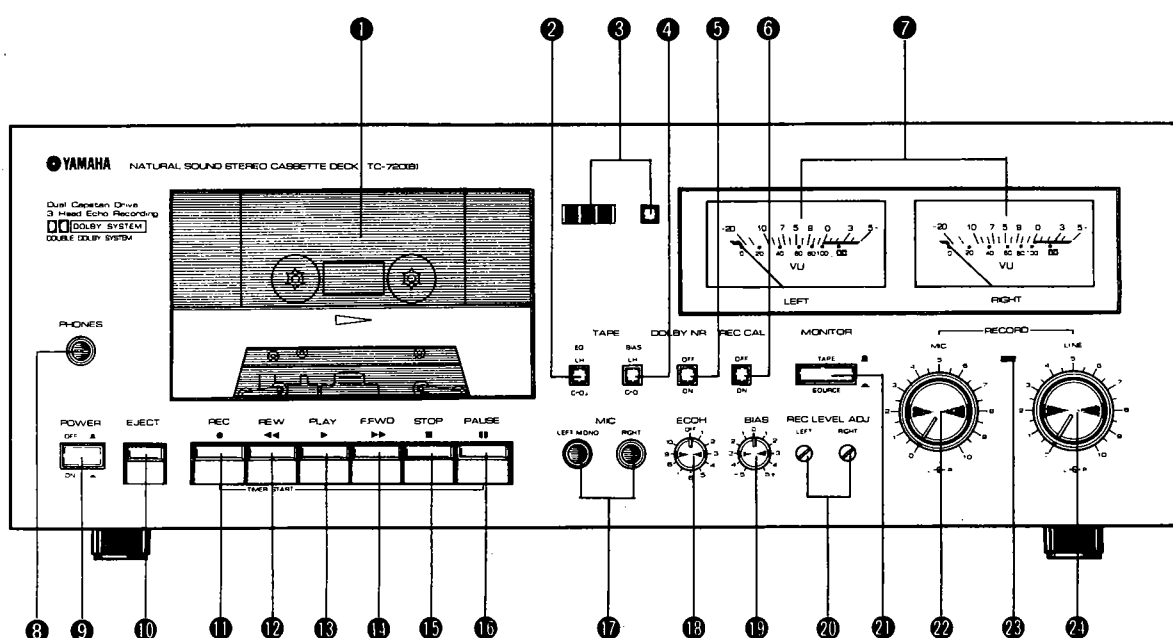


TC-720(B)

SERVICE MANUAL

FRONT PANEL



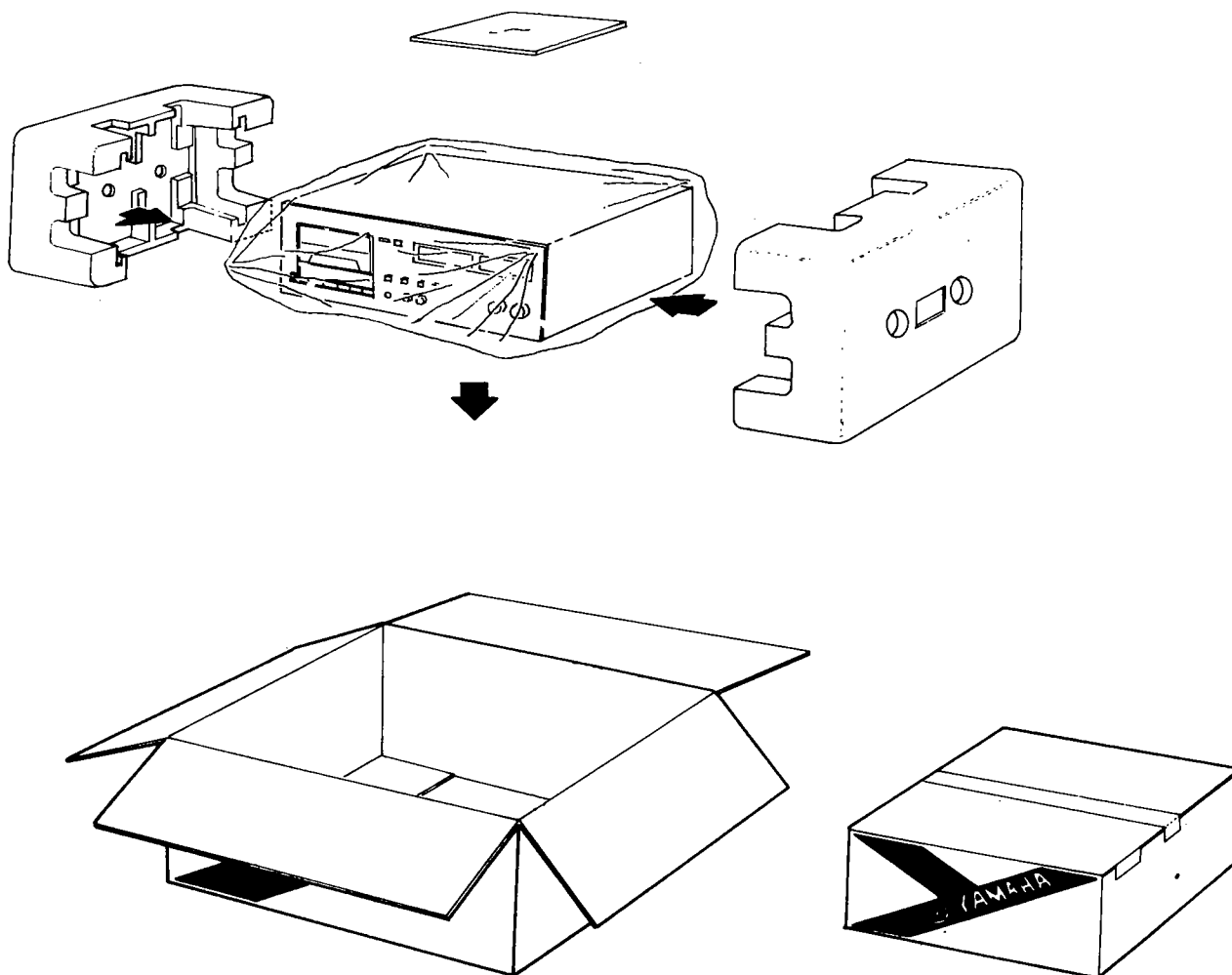
- ① CASSETTE COMPARTMENT
- ② TAPE EQ SWITCH
- ③ TAPE COUNTER/RESET BUTTON
- ④ TAPE BIAS SWITCH
- ⑤ DOLBY NR SWITCH
- ⑥ REC CAL SWITCH
- ⑦ VU LEVEL METER
- ⑧ PHONES JACK
- ⑨ POWER SWITCH
- ⑩ EJECT BUTTON
- ⑪ REC ● BUTTON
- ⑫ REW ◀◀ BUTTON

- ⑬ PLAY ▶ BUTTON
- ⑭ F.FWD ▶▶ BUTTON
- ⑮ STOP ■ BUTTON
- ⑯ PAUSE ■■ BUTTON
- ⑰ MIC JACKS
- ⑱ ECHO CONTROL
- ⑲ BIAS ADJ. CONTROL KNOB
- ⑳ REC LEVEL
- ㉑ MONITOR SWITCH
- ㉒ MIC LEVEL CONTROL KNOB
- ㉓ RECORDING INDICATOR
- ㉔ LINE LEVEL CONTROL KNOB

CONTENTS

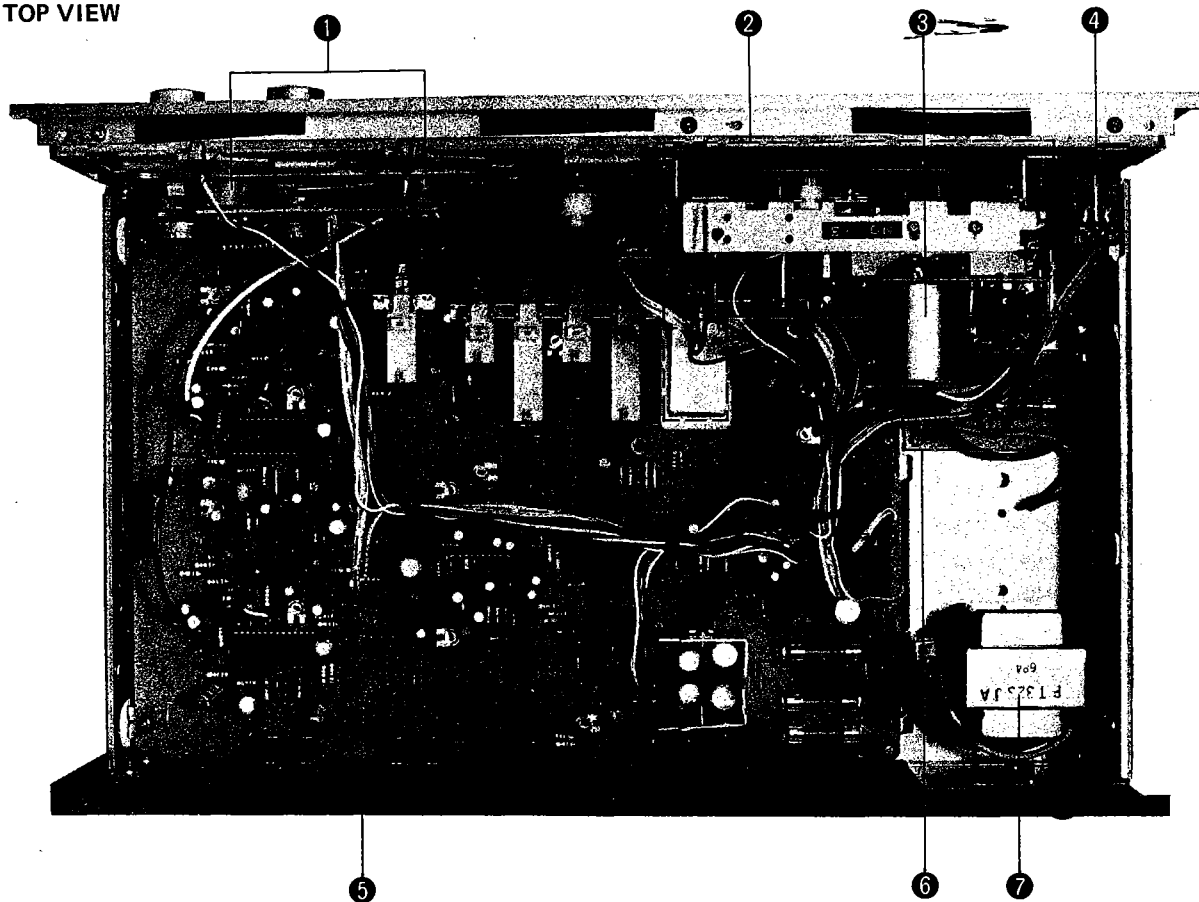
PACKAGE INSTRUCTION	2
INTERNAL VIEW	3
DISASSEMBLY PROCEDURE	4
ADJUSTMENTS	6
BLOCK DIAGRAM	7
SPECIFICATIONS	8
WIRING	9
SCHEMATIC DIAGRAM	10

PACKAGE



INTERNAL VIEW

TOP VIEW



- ① VU LEVEL METER
- ② CASSETTE MECHANISM
- ③ MOTOR
- ④ PHONES JACK

- ⑤ PB/REC PRINTED CIRCUIT BOARD
- ⑥ POWER SUPPLY PRINTED CIRCUIT BOARD (FUSE)
- ⑦ POWER TRANSFORMER

DISASSEMBLY PROCEDURE

1. Top cover removal

Loosen the left and right screws 1 and 2 in Photo 1, and then remove the top cover.

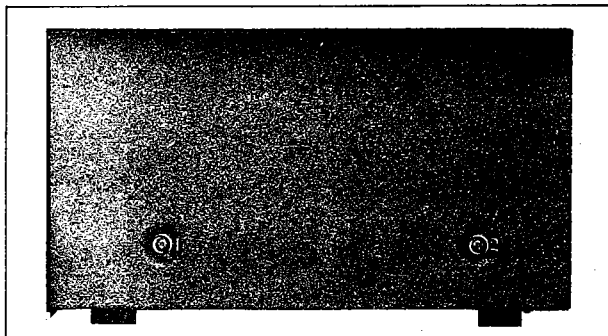


Photo 1

2. Bottom cover removal

Loosen the screws 1 to 7 in Photo 2, and then remove the bottom cover.

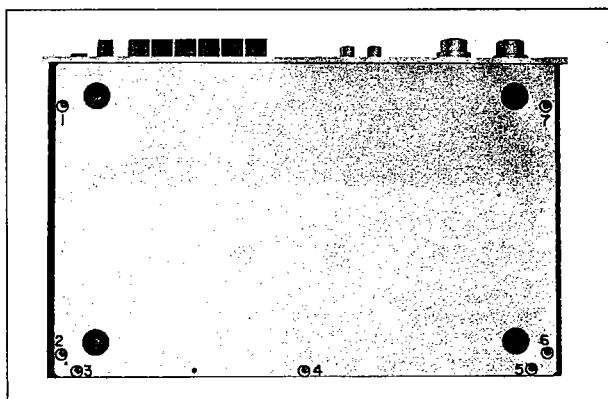


Photo 2

3. Front panel removal

- Remove the top and bottom covers. (Refer to step 1 and 2.)
- Remove the knobs (ECHO, BIAS) 1 in Photo 3.
- Loosen the screws 1 to 3 in Photo 4 and 1 to 3 in Photo 5 and take out the front panel.

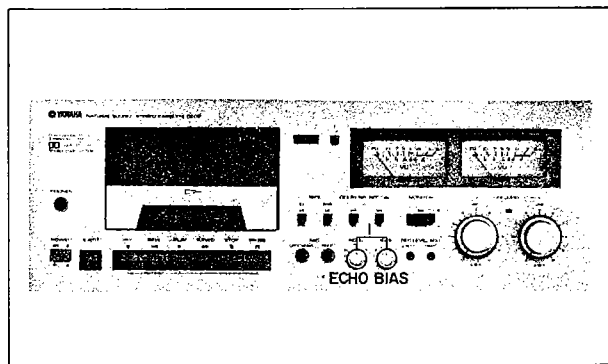


Photo 3

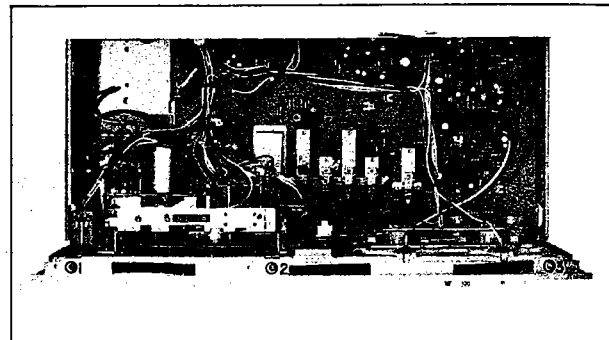


Photo 4

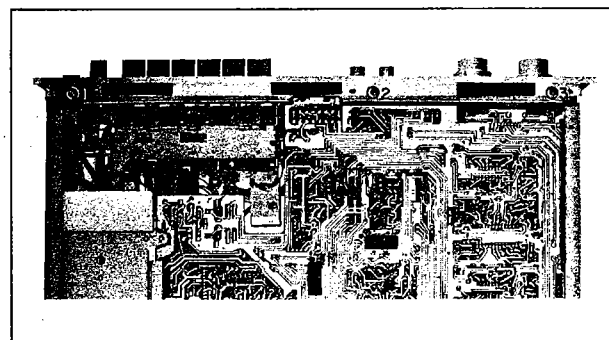


Photo 5

4. Tape mechanism assembly removal

- Remove the front panel. (refer to step 3.)
- Detach the lead wires of the tape mechanism assembly.
- Remove the rubber belt 1 in Photo 6.
- Remove the screws 1 to 4 and remove the L type metal fitting 17 in Photo 7.

Remove the screws 2 to 3 in Photo 6 and remove the power supply circuit board (Fuse), so it is easy to remove the tape mechanism assembly.

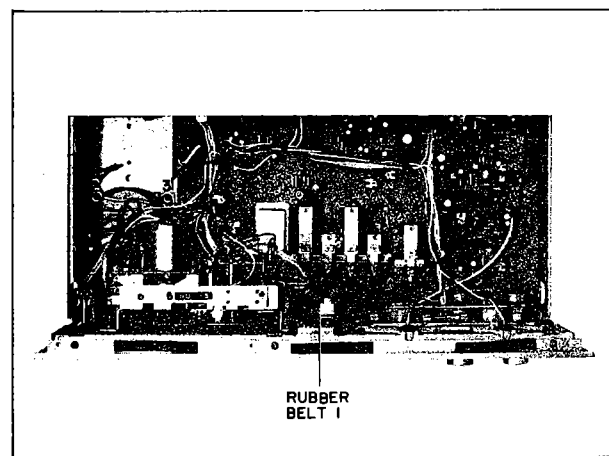


Photo 6

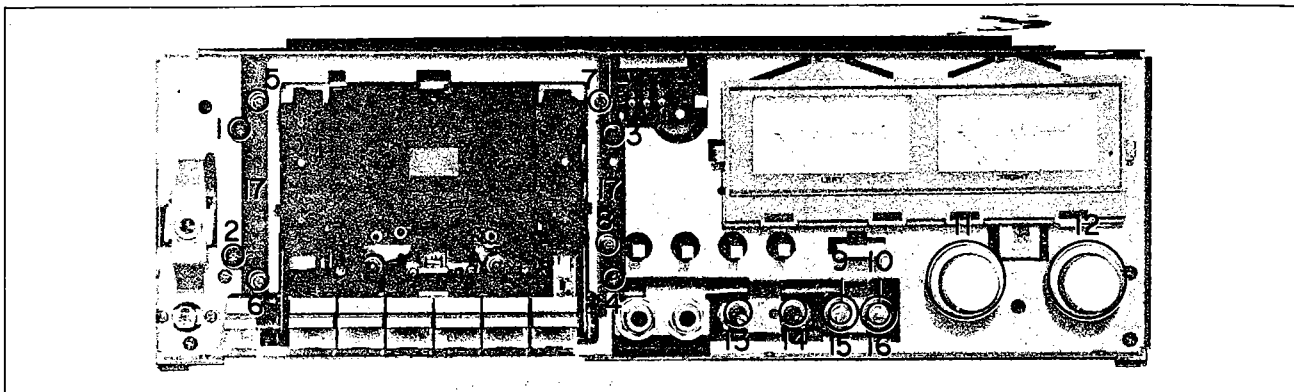


Photo 7

5. Record/Playback printed circuit board removal

- Remove the front panel. (refer to step 3.)
- Detach the connectors and lead wires.
- Pull out the knobs 9 to 12 in Photo 7 and remove the nuts 13 to 16.
- Remove the plastic rivets 1 to 3 in Photo 8.
- Remove the screws 1 to 4 in Photo 9 and remove the Record/Playback printed circuit board.

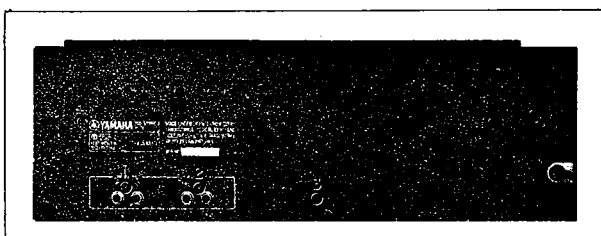


Photo 8

6. Power supply printed circuit board (Fuse) removal

When removing the power supply printed circuit board, do pull out the AC cord.

- Remove the top cover.
- Remove the screws 5 to 6 in Photo 9 and remove the power supply printed circuit board (Fuse).

7. Power transformer removal

- Remove the top cover. (refer to step 1.)
- Remove the screws 7 and 8 and remove the power transformer.

8. Power switch removal

When removing power switch, do pull out the AC cord.

- Remove the front panel. (refer to step 3.)
- Remove the tape mechanism assembly.
- Pull out the knobs 9 to 12 and remove the nuts 13 to 16. (refer to step 5, c.)
- Remove the screws 1 to 4 in Photo 10 and remove the back plate 8.
- Remove the screws 1 to 4 in Photo 10 and remove the power switch.

9. Headphone jack removal

- Remove the front panel. (refer to step 3.)
- Remove the nut 7 in Photo 10 and remove the headphone jack.

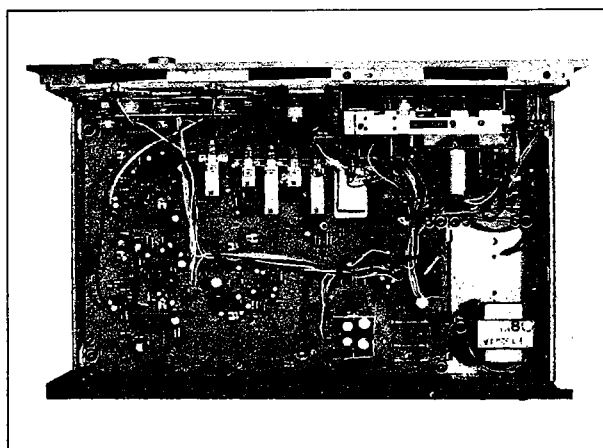


Photo 9

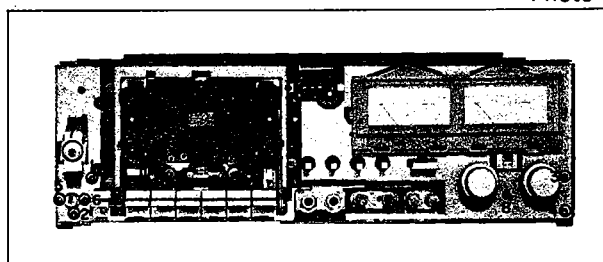
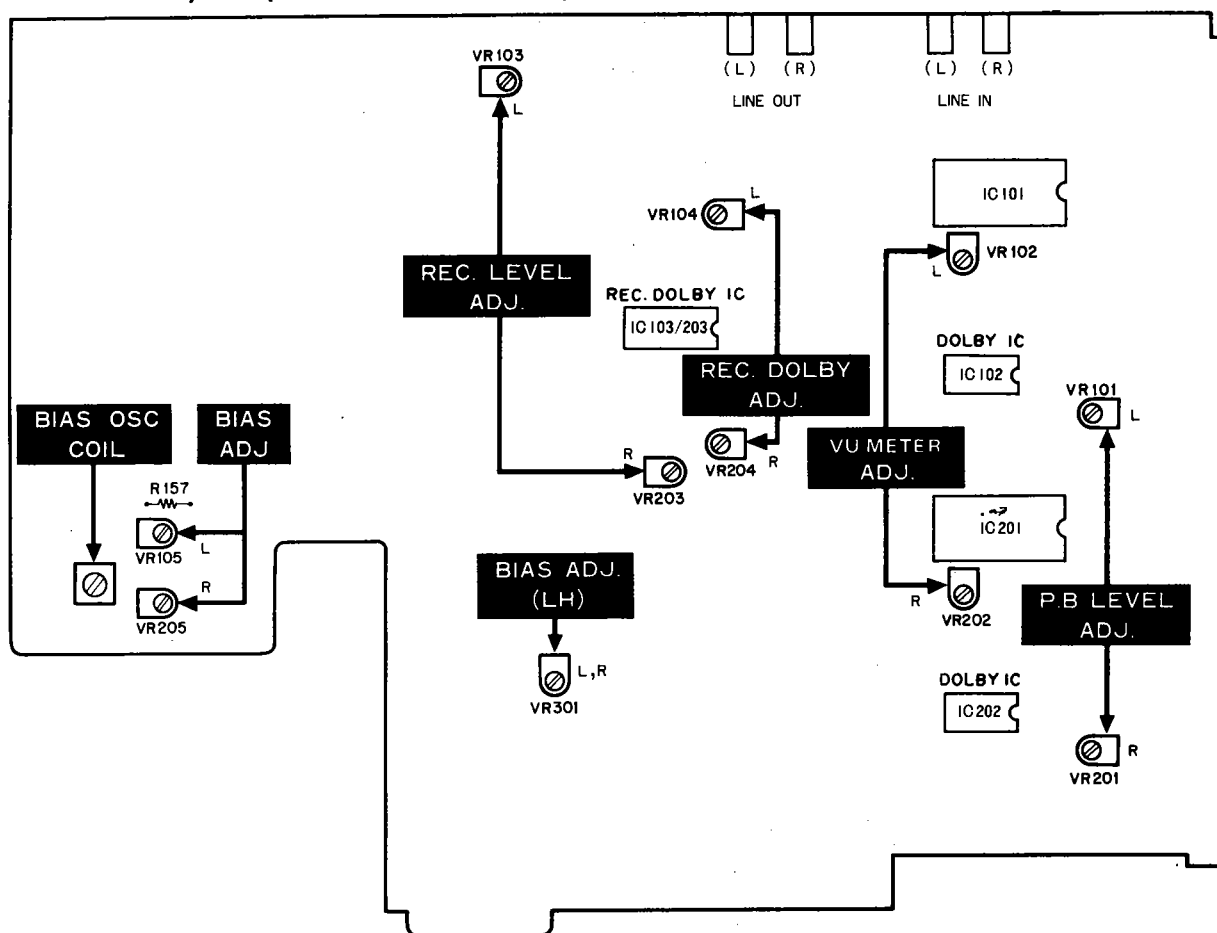


Photo 10

■ ADJUSTMENTS

1. Record/Playback printed circuit board adjustment



2. Playback level adjustment

- 1) Set the Monitor switch to TAPE.
- 2) Play back the MTT-116U (1kHz 160 nwb/m) test tape, rotate the VR101 (left channel) and VR201 (right channel) on the record/playback printed circuit board, and adjust so that the VTVM display indicates -5.5dBm .

3. VU meter adjustment

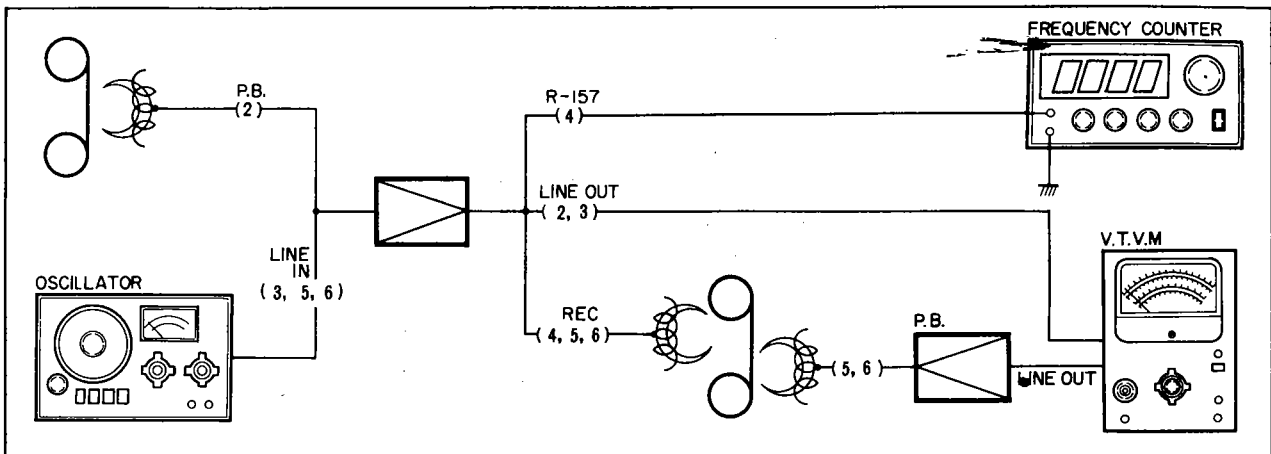
- 1) Set the Monitor switch to SOURCE.
- 2) Adjust for a -5.5dBm value at the line out terminals when a 1kHz -20dBm signal is applied to the line in terminals from the audio frequency oscillator.
- 3) Adjust semi-fixed resistor VR102 (left channel) and VR202 (right channel) on the record/playback printed circuit board so that the VU meter deflects to 0VU.

4. BIAS oscillator frequency adjustment

Set to the recording mode but do not apply a signal. Measure the bias oscillator frequency at the end of R157 ($10\ \Omega$) resistor and check that it is 105kHz. If the frequency deviates widely, rotate the BIAS OSC COIL core and adjust to 105kHz.

5. Recording level adjustment

- 1) Apply 1kHz, -20dBm signal at LINE IN terminals.
- 2) Set the MONITOR switch to SOURCE. Adjust the LINE controls to produce a -5.5dBm output at the LINE OUT terminals and record.
- 3) Set the MONITOR switch to TAPE. Adjust REC LEVEL ADJ. (VR103 [left channel], VR203 [right channel]) so that the output at the LINE OUT terminals is -5.5dBm .
Adjust by using a LH tape and check CrO_2 tape.



6. Record/Playback frequency response adjustment

1) When the Dolby NR switch is set to OFF.

a. CrO₂ tape SA-C60 used.

Apply a 1kHz, -20dBm signal to the LINE IN terminals. (Set the MONITOR switch to SOURCE). Adjust the front panel LINE control for both channels for a level of -5.5dBm at the LINE OUT terminals. (Set the MONITOR switch to SOURCE). Now make the input level -40dBm. (Set the MONITOR switch to TAPE). Apply a 63Hz to 14kHz signal. Record and play back the signals and adjust VR105 (left channel) and

VR205 (right channel) on the record/playback printed circuit board so that the output level at 63Hz to 14kHz is flat.

b. LH tape UD-C60 used.

1. Same as step a.

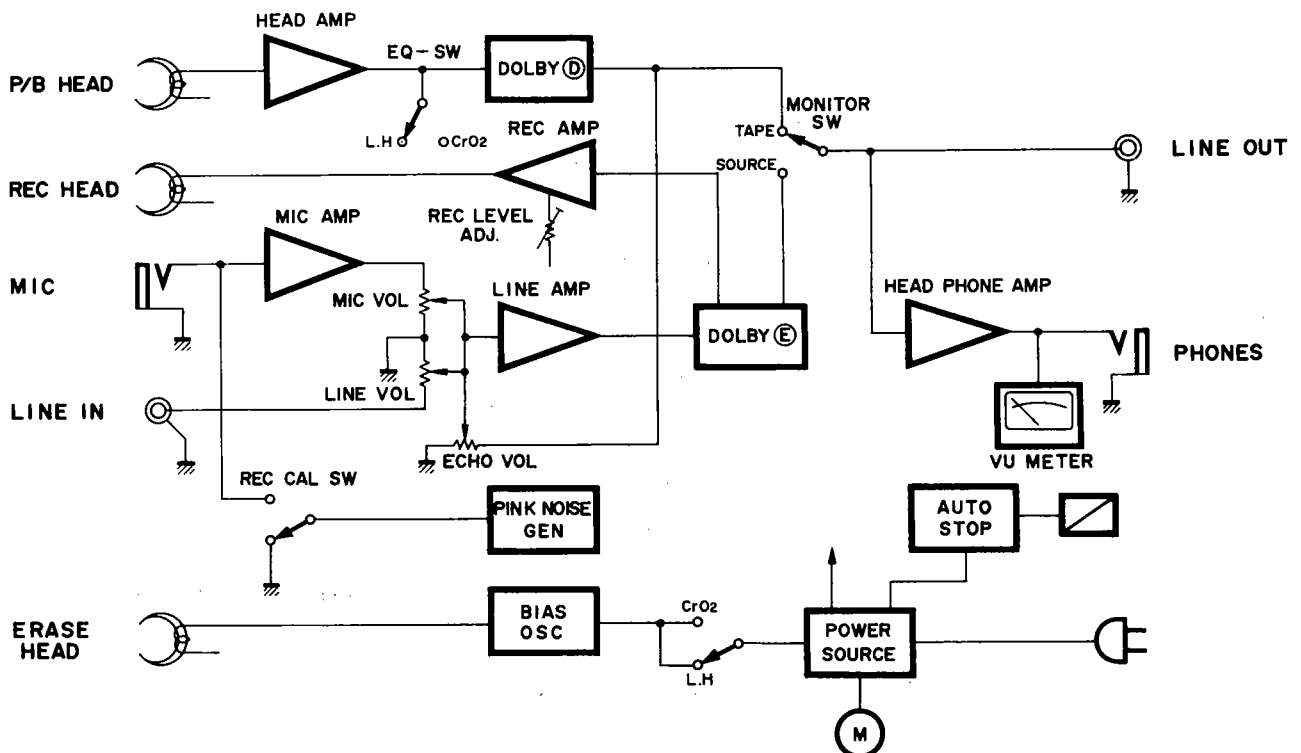
2. Adjust VR301 (left and right channel) so that the output level at each of the frequencies is flat.

2) When the Dolby NR switch is set to ON.

a. Same as step a.

b. Adjust the REC DOLBY ADJ. (VR104 [L], VR204 [R]) so that the output level at 1 ~ 10kHz is flat.

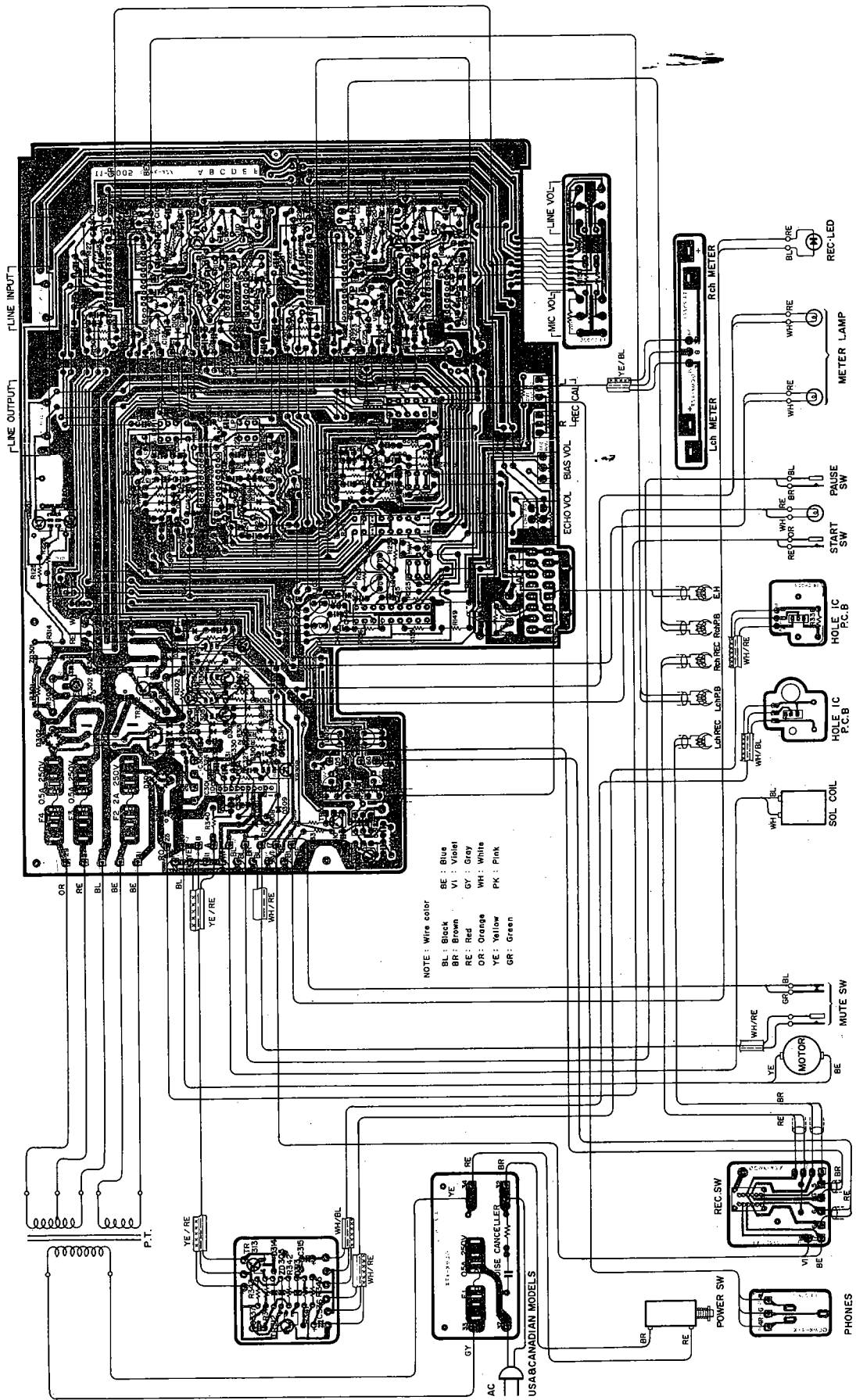
■ BLOCK DIAGRAM



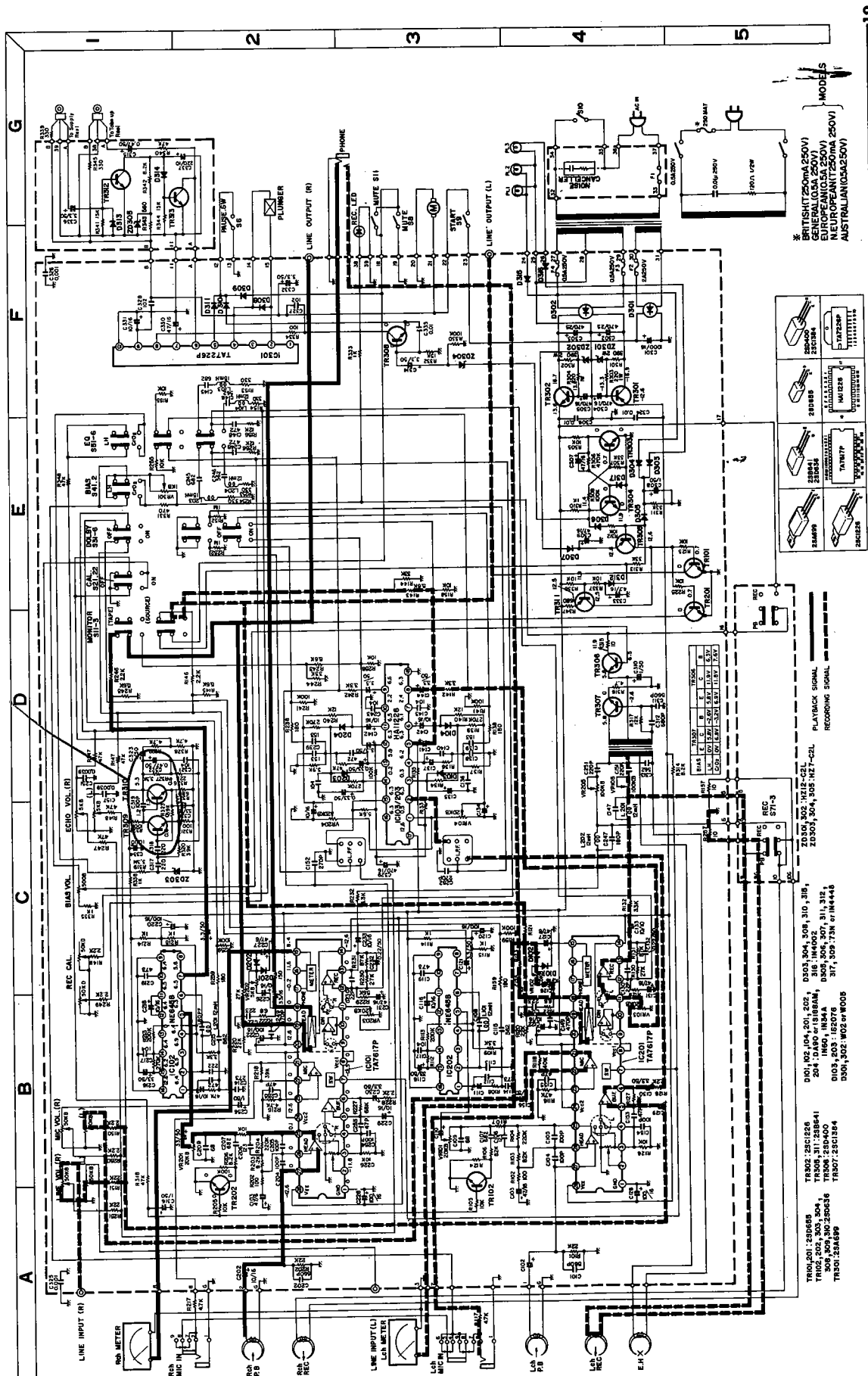
SPECIFICATIONS

Type	4-track, 2-channel stereo cassette deck
Cassette mechanism	
Tape speed	4.8 cm/sec
Motor	F.G servo motor
Wow and flutter	Less than 0.06% (WRMS), 0.2% (DIN, 45,500)
Fast forward/rewind time	Within 90 seconds (with C-60 tape)
Amplifier section	
Recording/playback frequency response	30 to 15,000 Hz (40 to 13,000 Hz \pm 3dB) (LH tape) 30 to 17,000 Hz (40 to 15,000 Hz \pm 3dB) (CrO ₂ tape)
Total distortion	Less than 1.5% (LH tape, 1kHz) Less than 2.0% (CrO ₂ , 1kHz)
Total signal to noise ratio	Better than 57dB (JIS)
Dolby NR effect	9dB
Channel separation	More than 30dB (1kHz)
Bias frequency	105kHz
Bias selector	LH, CrO ₂
Equalizer selector	LH, 120 μ Sec. + 3180 μ Sec. : CrO ₂ 70 μ Sec. + 3180 μ Sec.
Input sensitivity/impedance	MIC: 0.3mV/5K Ω LINE: 50mV/50K Ω
Output level/impedance	LINE: 0.4V/less than 5K Ω PHONES: 1mW/8 Ω , 3mW/150 Ω
Echo effect volume	0 to Max continuous variable
Bias current control range	\pm 15%
Calibration signal	Pink noise
Recording/playback head	Ferrite (combination)
Erasing head	Ferrite
Monitor switch	Tape, source selector
General	
Semiconductors	8 ICs, 17 Transistors, 27 Diodes, 1 LEDs
Power consumption	14W
Power supplies	USA & Canadian models 120V AC 60Hz European model 110 ~ 130V/220 ~ 240V, AC 50Hz North European model 220V, AC 50Hz General model 110 ~ 130V/220 ~ 240V, AC 50/60Hz British & Australian model 240V, AC 50Hz
Dimensions (W x D x H)	435 x 288 x 150mm (17-1/8" x 11-1/4" x 6")
Weight	6.9kg (15 lbs 3 oz)
(Specifications and design are subject to change without notice since the policy of this company is one of continuous improvement.)	

■ WIRING



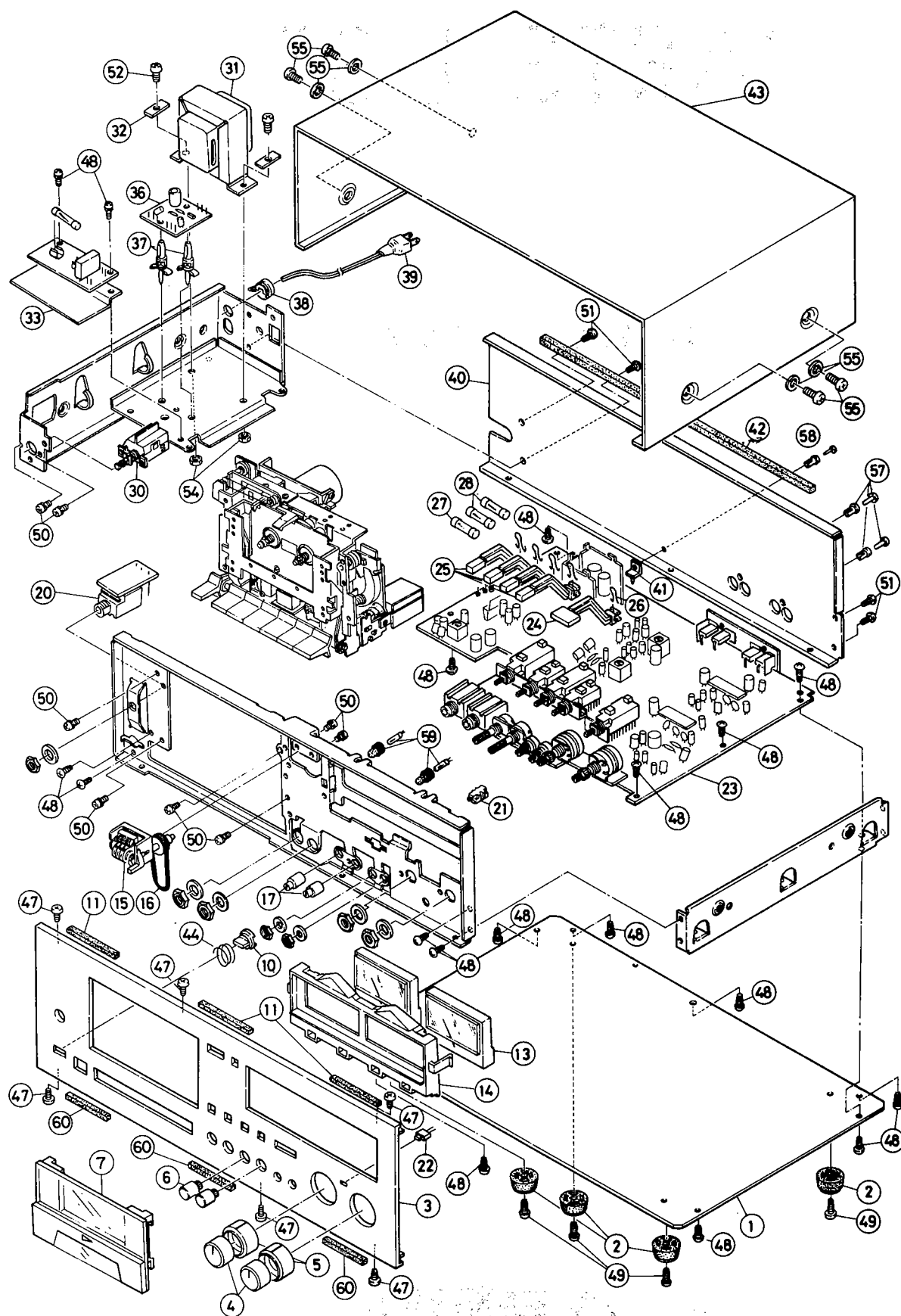
SCHEMATIC DIAGRAM



PARTS LIST

TC-720, TC-720B

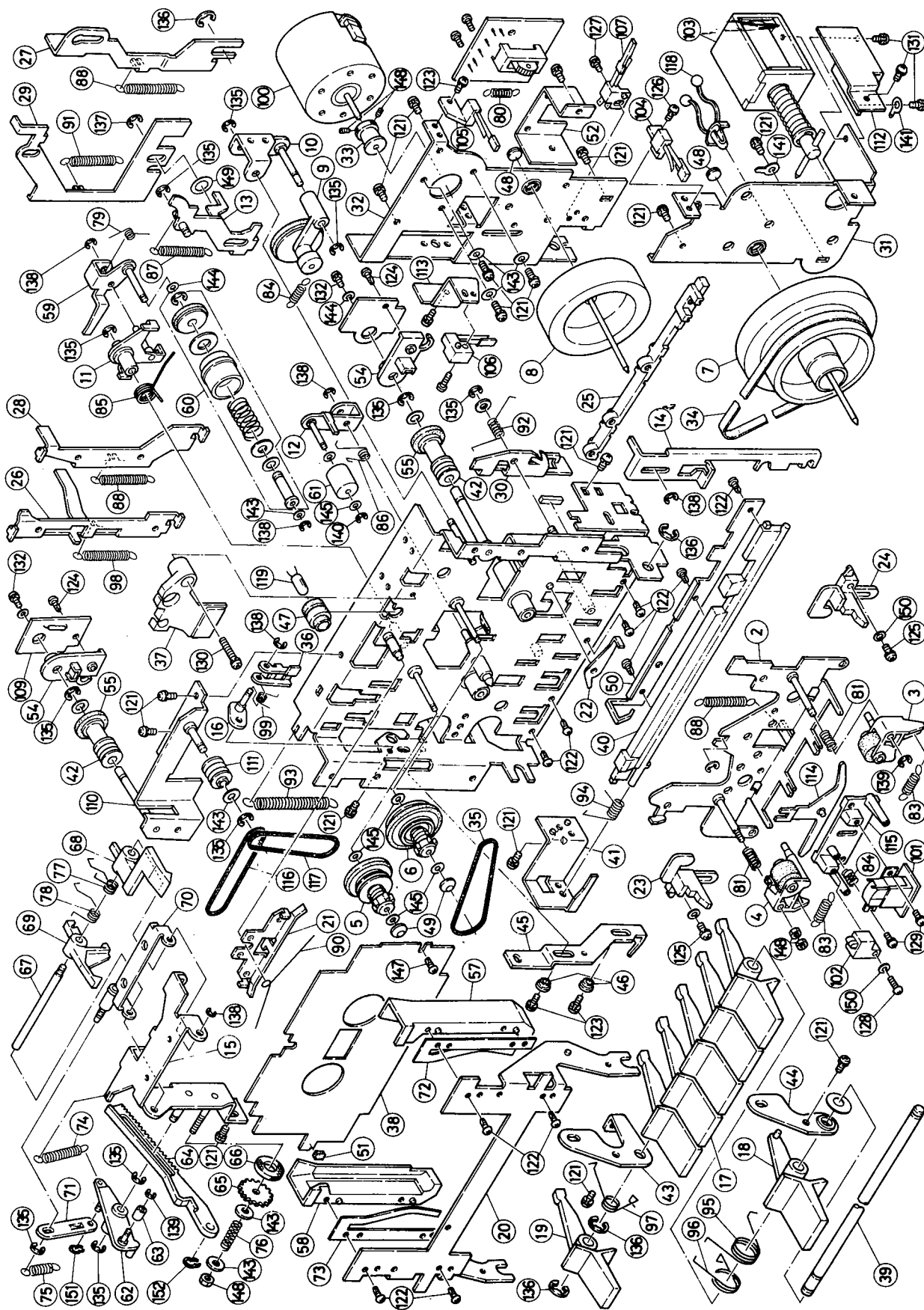
SINCE 1887  **YAMAHA**
NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN



※ : New Parts

Ref No.	Part No.	Description	部 品 名	Remarks
※ 1	32 00 00 SX 70 65 90	Bottom Cover	底板	T2-1849
2	32 00 00 SX 70 66 00	Leg	トランレグT-C	T4-12067
3	32 00 00 SX 70 61 70	Front Panel Unit(J)	表面パネル組立	323-13
	32 00 00 SX 70 61 60	" (EX)	表面パネル組立S	323-12
※ 4	32 00 00 BA 07 47 00	Knob V.R(S)	Lボリュームツマミ小	
※ 5	32 00 00 BA 07 47 10	Knob V.R(S)	Rボリュームツマミ大	
※ 6	32 00 00 BA 07 46 90	Knob (S)	ツマミS	T4-16426
7	32 00 00 SX 70 61 80	Cassette Lid Make up Plate Assy	リッド化粧板組立	
※ 10	32 00 00 SX 70 66 80	Push Button	押ボタンS	T4-16498
※ 11	32 00 00 SX 70 66 50	Top Cover	外装カバークッション	T4-16483
※ 13	32 00 00 SX 70 63 70	Level Meter	レベルメーター VU-21-01	T4-28280
14	32 00 00 SX 70 56 10	Meter Cover S	メーターカバーS	T2-1868
15	32 00 00 SX 70 62 20	Index Counter	カウンター	T4-16410
16	32 00 00 SX 70 00 90	Belt, Index Counter	カウンターベルト	T4-16036
※ 17	32 00 00 SX 70 66 40	Adjust Knob	アジャストツマミS	T4-16432
20	32 00 00 SX 70 21 50	Head Phone Jack	ヘッドホンジャック	T4-28103
※ 21	32 00 00 SX 70 66 70	LED Socket	ユニバーサルLEDソケット	T4-28248
22	42 00 00 I F 00 12 80	LED SLB-2SUR	LED	T4-28109
23	32 00 00 SX 70 54 80	Main Circuit Board (A) (J,U,C,A,E,R)	メインP.C.B組立A	TA1-8003
	32 00 00 SX 70 54 90	" (B) (B,G)	" B	
※ 24	32 00 00 SX 70 66 30	Push Button, Monitor	モニター押ボタンS	T4-16423
	32 00 00 SX 70 55 50	Lever	ブッシュスイッチ連動レバー	T3-2035
25	32 00 00 SX 70 66 20	Push Button	押ボタンS	T4-16421
※	32 00 00 SX 70 55 50	Push Switch Cluch Lever Ass'y	ブッシュスイッチ連動レバー	T3-2035
※ 26	32 00 00 SX 70 66 90	Snap Retena	スナップリテーナ	T4-16492
27	42 00 00 KB 00 03 50	Fuse 2A, 250V (J,A,E,R)	ヒューズ	T4-8760
	KB 00 10 30	" 2A, 250V (U,C)	"	T4-8761
	KB 00 07 30	" T1A, 250V (B,G)	ミゼットヒューズ	T4-8213
28	42 00 00 KB 00 03 10	" 0.5A,250V (J,A,E,R)	ヒューズ	T4-8839
	KB 00 10 00	" 0.5A,250V (U,C)	ヒューズ	T4-8750
	KB 00 06 50	" 315mA,250V (B,G)	ミゼットヒューズ	T4-18173
※ 30	32 00 00 SX 70 65 60	Power Switch (J)	電源スイッチ	T4-28244
※	SX 70 65 70	" (U,C)	"	T4-28245
	SX 70 65 80	" (SEMC0,II) (B,A,E,G,R)	"	T4-8980
※ 31	32 00 00 SX 70 65 00	Power Transformer (J)	電源トランスPT323	T4-28239
※	SX 70 65 10	" (U,C)	" PT323	T4-28240
※	SX 70 65 20	" (B)	" PT323	T4-28241
※	SX 70 65 30	" (R)	" PT323	T4-28242
※	SX 70 65 40	" (G)	" PT323	T4-28243
32	32 00 00 SX 70 05 90	Holder, Transformer	トランス押え	T4-13088
※ 33	32 00 00 SX 60 67 00	Insulator Board	絶縁板	T4-16494
36	32 00 00 SX 70 55 10	Supply Shut off Circuit Board	サプライシャutoffP.C.B組立	TA4-28347
※ 37	32 00 00 SX 70 67 10	Holder, Circuit Board	基板ホルダー	T4-16708
38	32 00 00 SX 70 56 50	Cord Stopper T4 (J,U,C,A)	コードブッシングSR-3P-4	T4-18125
	32 00 00 SX 70 05 80	" (E,G,R)	" SR-4N-4	T4-10595

[illegible]



✧ : New Parts

Ref No.	Part No.	Description	部 品 名		Remarks
※ 2	32 00 00 SX 70 51 00	Head Base Assembly	ヘッドベース組立		TA3-2031
※ 3	32 00 00 SX 70 51 30	Pinch Roller Arm B Ass'y	ピンチローラーアームB組立		TA4-16401
※ 4	32 00 00 SX 70 51 20	" A "	ピンチローラーアームA組立		TA4-16400
※ 5	32 00 00 SX 70 51 90	Reel Base B Ass'y	リール受組立B		TA4-16701
6	32 00 00 SX 70 08 50	" A "	" A		TA4-15757
7	32 00 00 SX 70 08 70	Flywheel Ass'y	フライホイール組立		TA4-15559
※ 8	32 00 00 SX 70 52 00	"	"		T4-16354
9	32 00 00 SX 70 08 80	Take-up Idler Ass'y	テイクアップアイドラ組立		TA4-15759
10	32 00 00 SX 70 08 90	Take-up Lever	テイクアップレバー組立		TA4-15761
※ 11	32 00 00 SX 70 51 40	F.R Lever Ass'y B	FRレバー組立B		TA4-16772
12	32 00 00 SX 70 09 10	Idler B Lever Ass'y	アイドラBレバー組立		TA4-15765
13	32 00 00 SX 70 09 20	Head Base Actuating Plate Ass'y	ヘッドベース作動板組立		TA4-15766
14	32 00 00 SX 70 09 30	Pause Interlocking Lever Ass'y	ポーズ連動レバー組立		TA4-15767
15	32 00 00 SX 70 09 40	Cassette Holding Mounting Plate Ass'y	カセット押え取付板組立		TA4-15768
16	32 00 00 SX 70 09 50	REC Stopper mounting	RECストッパー取付板組立		TA4-15771
17	32 00 00 SX 70 09 70	Push Button Lever	押ボタンレバーS(シルバー)		TA4-16023
18	32 00 00 SX 70 09 90	PAUSE Button Lever Assembly (S)	PAUSE押ボタンレバーS組立		TA4-16020
19	32 00 00 SX 70 10 10	EJECT Button Lever	EJECT押ボタンレバーS		T4-16024
※ 20	32 00 00 SX 70 52 10	Cassette Holder	カセットホルダー		T3-2032
21	32 00 00 SX 70 10 40	Brake Lever	ブレーキレバー		T4-15599
22	32 00 00 SX 70 10 50	Pinch Roller Interlocking Plate	ピンチローラー作動板		T4-15600
※ 23	32 00 00 SX 70 52 40	Head Base Holding (L)	ヘッドベース押えL		T3-2042
※ 24	32 00 00 SX 70 52 50	" (R)	" R		T3-2043
25	32 00 00 SX 70 10 80	Stopper, Push Button	押ボタンストッパー		T3-1955
26	32 00 00 SX 70 10 90	Lever REC	RECレバー		T4-15602
27	32 00 00 SX 70 11 00	Lever F.F.	FFレバー		T4-15603
28	32 00 00 SX 70 11 10	Lever, Rew	REWレバー		T4-15604
29	32 00 00 SX 70 11 20	Spring, Brake Interlocking	ブレーキ作動バネ		T4-15605
30	32 00 00 SX 70 54 40	Pause lock Plate B	ポーズロック板B		T4-16693
31	32 00 00 SX 70 11 40	Flywheel Base	フライホイール受板		T4-15607
※ 32	32 00 00 SX 70 56 70	Motor Base	モーター受板		T4-16491
33	32 00 00 SX 70 11 60	Motor Pulley	モータープーリー		T4-15608
※ 34	32 00 00 SX 70 58 00	Belt, Motor 77.2×0.4	平ベルト		T4-16360
35	32 00 00 SX 70 11 80	Belt, Index Counter	カウンターベルト		T4-14427
36	32 00 00 SX 70 11 90	Stopper, REC	RECストッパー		T4-15611
※ 37	32 00 00 SX 70 53 00	Prism, Illumination	照明プリズム		T4-16447
※ 38	32 00 00 SX 70 67 30	Make up Plate	化粧板		T4-16403
39	32 00 00 SX 70 12 20	Shaft, Push Button	押ボタン軸		T4-16027
40	32 00 00 SX 70 12 30	Lock Plate, Push Button	押ボタンロック板		T3-1956
41	32 00 00 SX 70 12 40	Holder (Lock Plate)	押ボタンロック板ホルダー		T4-15615
42	32 00 00 SX 70 12 50	Idler, INDEX Counter	カウンターアイドラ		T4-16322
※ 43	32 00 00 SX 70 53 10	Mounting Plate for Cassette Holder (L)	カセットホルダー固定板(L)		T4-16444
44	32 00 00 SX 70 12 70	" (R)	" (R)		T4-15618
45	32 00 00 SX 70 12 80	Lever Eject	エジェクトレバー		T4-15619
46	32 00 00 SX 70 12 90	Spacer, EJECT Lever	エジェクトレバーカラン		T4-15558

※ : New Parts

Ref No.	Part No.	Description	部 品 名	Remarks
47	32 00 00 SX 70 13 00	Tube, Pilot Lamp	ランプチューブ	T4-14375
48	32 00 00 SX 70 52 90	Screw, Flywheel Adjust	フライホイール調整ネジ	T4-7869
49	32 00 00 SX 98 83 90	Cap Reel Shaft	リール軸キャップ	T4-12471
※ 50	32 00 00 SX 70 53 20	Spacer, Lock Plate	ロック板補強板	T4-16445
51	32 00 00 SX 70 13 20	Damper	ビリ止めクッション	T4-16336
54	32 00 00 SX 70 13 60	Holder Hole Element	ホール素子固定板	T4-16055
55	32 00 00 SX 70 13 70	Magnet	終端検出マグネット	T4-16056
※ 57	32 00 00 SX 70 52 20	Cassette Guide (L)	カセットガイド L	T3-2044
※ 58	32 00 00 SX 70 52 30	" (R)	" R	T3-2045
59	32 00 00 SX 70 14 00	Idler Lever Ass'y	アイドラーレバー組立	TA4-15763
60	32 00 00 SX 70 14 10	Idler Lever A Ass'y	アイドラー A 組立	TA4-15764
61	32 00 00 SX 70 14 20	" B "	アイドラー B "	TA4-15575
62	32 00 00 SX 70 14 30	Hook Lever Assembly	フックレバー組立	TA4-15769
63	32 00 00 SX 70 14 40	Roller	ローラー	T4-15584
64	32 00 00 SX 70 14 50	Lock Plate, Cassette Holder	カセットホルダーロック板	T4-15585
65	32 00 00 SX 70 14 60	Gear	フリクションギア	T4-15586
66	32 00 00 SX 70 14 70	Spacer (Felt)	フェルト	T4-9509
67	32 00 00 SX 70 14 80	Shaft, Detection Record Lock	録音防止レバー軸	T4-15587
68	32 00 00 SX 70 14 90	Cassette Holding	カセット押え	T4-15588
69	32 00 00 SX 70 15 00	Detection Record Lock	録音防止レバー	T4-15589
70	32 00 00 SX 70 15 10	Interlocking Lever Eject B Ass'y	エジェクト連動レバー B 組立	TA4-15770
71	32 00 00 SX 70 15 20	" A	" A	T4-15592
72	32 00 00 SX 70 15 30	Cassette Holding Spring (R)	カセット押えバネ R	T4-15598
73	32 00 00 SX 70 15 40	" (L)	" L	T4-15597
74	32 00 00 SX 70 15 50	Hook Lever Spring	フックレバーバネ	T4-15798
75	32 00 00 SX 70 15 60	EJECT Interlocking lever Spring	エジェクト連動レバーバネ	T4-15802
76	32 00 00 SX 70 15 70	Spring	圧着バネ	T4-15803
77	32 00 00 SX 70 15 80	Spring Cassette Holding	カセット押えバネ	T4-15800
78	32 00 00 SX 70 15 90	Spring, Idler Lever	録音防止レバーバネ	T4-15801
79	32 00 00 SX 70 16 00	Spring Idler Lever	アイドラーレバーバネ	T4-15794
80	32 00 00 SX 70 54 20	Spring, REC Swith Actuating	RECスイッチ作動バネ	T4-16489
81	32 00 00 SX 70 54 00	Spring	圧縮バネ	T4-16408
※ 82	32 00 00 SX 70 53 70	Spring, Head Adjust	ヘッド調整バネ	T4-16362
83	32 00 00 SX 70 53 80	Spring, Pinch Roller	ピンチローラーバネ	T4-16406
84	32 00 00 SX 70 16 40	Spring, Take-up Lever	テイクアップレバーバネ	T4-15792
85	32 00 00 SX 70 16 50	Spring, FR Lever	FRレバーバネ	T4-15793
86	32 00 00 SX 70 16 60	Spring, Idler B Lever	アイドラ B レバーバネ	T4-15796
87	32 00 00 SX 70 16 70	Spring, Head Base Actuating P	ヘッドベース作動板バネ	T4-15797
88	32 00 00 SX 70 16 80	Spring, Head Base	ヘッドベースバネ	T4-15799
90	32 00 00 SX 70 17 00	Spring, Brake Lever	ブレーキレバーバネ	T4-15805
91	32 00 00 SX 70 17 10	Spring, Brake Actuating Lever	ブレーキ作動レバーバネ	T4-15807
92	32 00 00 SX 70 17 20	Pause Lock Plate	ポーズロック板バネ	T4-15808
93	32 00 00 SX 70 17 30	Spring, Cassette Holder	カセットホルダーバネ	T4-15810
94	32 00 00 SX 70 17 40	Spring, Push Button Lock Plate	押ボタンロック板バネ	T4-15811

* : New Parts

Ref. No.	Part No.	Description	部 品 名	Remarks
95	32 00 00 SX 70 17 50	Spring, Pause Button	ポーズボタンバネ	T4-15812
96	32 00 00 SX 70 17 60	Spring, Stop Button	ストップボタンバネ	T4-15813
97	32 00 00 SX 70 17 70	Spring, Eject Button	エジェクトボタンバネ	T4-15814
98	32 00 00 SX 70 17 80	Spring, REC Lever	RECレバーバネ	T4-16295
99	32 00 00 SX 70 17 90	Spring, REC Stopper	RECストッパーバネ	T4-16304
100	32 00 00 SX 70 60 60	Motor MMX-5A2 SA	モーター	T4-18355
* 101	32 00 00 GF 00 00 50	Recording, Playback Head	録再ヘッド	T3-8449
* 102	32 00 00 SX 70 60 80	Erase Head	消去ヘッド	T4-28188
* 103	32 00 00 SX 70 61 00	Plunger P-189B	プランジャー	TA4-28324
104	32 00 00 SX 70 00 40	Leaf Switch MSW-0038	リーフSW	T4-28113
105	32 00 00 SX 70 00 50	" MSW-0044	リーフSW	T4-28114
106	32 00 00 SX 70 60 90	" BSW-74B	"	T4-28282
107	32 00 00 SX 70 18 10	" BSW-81	"	T4-28181
109	32 00 00 SX 70 55 10	Supply Shut-Off P.C.B Ass'y	サブライシヤットオフ P.C.B.組立	TA4-28347
* 110	32 00 00 SX 70 51 70	Pulley Mounting Plate Ass'y	プーリー取付板組立	TA4-16703
111	32 00 00 SX 70 51 80	Idler Ass'y	アイドラー組立	TA4-16842
112	32 00 00 SX 70 54 30	Reinforce Plate	受板補強板	T4-16612
* 113	32 00 00 SX 70 53 40	Mute SW Plate	ミュートSW作動板	T4-16605
114	32 00 00 SX 70 51 50	Plate Ass'y	ピンチローラー解除板組立	TA4-16402
* 115	32 00 00 SX 70 52 70	Head Mounting Washer $\phi 40.9 \times \square 0.8$	ヘッド取付座	T3-2030
* 116	32 00 00 SX 70 60 00	Belt, (Square-Type) $\phi 35.4 \times \square 0.8$	角ベルト	T4-16706
117	32 00 00 SX 70 60 10	" (Square-Type)	"	T4-16707
118	32 00 00 SX 70 69 30	lock	バースロック	T4-8906
119	32 00 00 SX 70 02 40	Pilot Lamp	パイロットランプ	T4-28108
121	42 00 00 EH 02 60 40	Pan Head Sems Screw $\phi 26 \times 4$	⊕バネ座セムスネジ	Z4-5061
122	42 00 00 EA 02 00 60	Pan Head Tapping Screw $\phi 2 \times 6$	⊕ナベ小タッピンネジ	Z4-5054
123	42 00 00 EH 02 60 60	Pan Head Sems Screw M26×6	⊕バネ座付セムスネジ	Z4-5063
124	42 00 00 EA 02 60 80	Pan Head Tapping, Screw $\phi 2.6 \times 8$	⊕ナベ小タッピンネジ	Z4-5014
125	42 00 00 EH 02 60 70	Pan Head Sems Screw M2.6×7	⊕平座付セムスネジ	Z4-5069
126	42 00 00 EH 03 00 60	Pan Head Sems Screw M3×6	⊕バネ座付セムスネジ	Z4-5064
127	42 00 00 SX 99 70 20	Toothed lock Screw M2×5	⊕歯付小ネジ	Z4-5551
* 128	42 00 00 EH 02 61 20	Pan Head Sems Screw M2.6×12	⊕小形丸付セムスネジ	Z4-5988
* 129	42 00 00 EH 02 00 60	" M2×6	⊕バネ座付セムスネジ	Z4-5632
130	42 00 00 EH 02 61 20	" M2.6×12	⊕バネ座付セムスネジ	Z4-5072
131	42 00 00 EH 03 00 60	" M3×6	⊕バネ座付セムスネジ	Z4-5064
132	42 00 00 EH 02 00 40	" M2×4	⊕バネ座付セムスネジ	Z4-5074
134	42 00 00 SX 99 71 30	Flat Washer M3	平座金ミガキ丸2種	Z4-3329
135	42 00 00 EV 50 12 50	E Ring $\phi 2.5 \times 4$	スナップリング	Z4-1414
136	42 00 00 EV 50 14 00	" $\phi 4 \times 0.6$	スナップリング	Z4-1412
137	42 00 00 EV 50 13 00	" $\phi 3 \times 0.6$	"	Z4-1408
138	42 00 00 EV 50 12 00	" $\phi 2 \times 0.4$	"	Z4-1413
139	42 00 00 EV 50 11 20	" $\phi 1.2 \times 0.3$	"	Z4-1411
140	42 00 00 EV 50 15 00	" $\phi 1.5 \times 0.4$	"	Z4-1403
141	32 00 00 SX 70 18 30	Lug Terminal	ラグ端子	Z4-5173

※ : New Parts

[illegible]

※ : New Parts

Ref No.	Part No.	Description	部 品 名	Remarks
※	32 00 00 SX 70 54 80	Playback / Rec. Circuit Board (J)	録再, 再生シート	TA1-8003
※	32 00 00 SX 70 54 90	" (BS,SK)	"	TA1-8004
※	IC101 42 00 00 i G 99 01 60	IC TA7617P	IC	T4-28207
※	IC102 42 00 00 i G 99 01 70	IC NE645B-II	"	T4-28350
※	IC103 42 00 00 i G 99 01 80	IC HA11226	"	T4-28208
※	IC201 42 00 00 i G 99 01 60	IC TA7617P	"	T4-28207
	IC202 42 00 00 i G 99 00 60	IC NE645B	"	T4-28350
※	IC203 42 00 00 i G 99 01 80	IC HA11226	"	T4-28208
※	IC301 42 00 00 i G 99 01 90	IC TA7226P	"	T4-28209
	TR101 42 00 00 i D 06 55 00	Transistor 2SD655(D,E)	トランジスター	SD1-06551A
※	TR102 42 00 00 i D 99 00 10	" 2SD636(R)	"	SC1-06364
	TR201 42 00 00 i D 06 55 00	" 2SD655(D,E)	"	SD1-06551A
※	TR202 42 00 00 i D 99 00 10	" 2SD636(R)	"	SC1-06364
	TR301 42 00 00 i D 99 00 30	" 2SA699(Q,R)	"	SS1-06993A
	TR302 42 00 00 i C 12 26 00	" 2SC1226(Q,R)	"	SC1-12263A
※	TR303 304 42 00 00 i D 99 00 10	" 2SD636(R)	"	SC1-06364
※	TR305 42 00 00 i B 99 00 20	" 2SB641(R)	"	SB1-06414
	TR306 42 00 00 i D 04 00 00	" 2SD400(E)	"	SD1-04002
※	TR307 42 00 00 i C 99 01 40	" 2SC1384(S)	"	SC1-13845
※	TR308 ~ 310 42 00 00 i D 99 00 10	" 2SD636(R)	"	SC1-06364
※	TR311 42 00 00 i B 99 00 20	" 2SB641(R)	"	SB1-06414
	D101 102 42 00 00 i F 00 03 30	Diode 1S188AM	ダイオード	DG1-00004
※	D103 42 00 00 i F 99 03 70	" 1S2076	"	DS1-00023
	D104 42 00 00 i F 00 03 30	" 1S188AM	"	DG1-00004
	D201 202 42 00 00 i F 00 03 30	" 1S188AM	"	DG1-00004
※	D203 42 00 00 i F 99 03 70	" 1S2076	"	
	D204 42 00 00 i F 00 03 30	" 1S188AM	"	DG1-00004
※	2D301 302 42 00 00 i F 99 03 90	" HZ12-C2L	ツェナーダイオード	
	D301 302 32 00 00 SX 70 01 80	" W005	ダイオード(ブリッジタイプ)	DS1-00021
※	D303 304 42 00 00 i F 99 03 80	Zener Diode HZ7-C2L	ツェナーダイオード	
	D305 ~ 307 42 00 00 i F 00 06 70	Diode 1S2473	ダイオード	DS1-00008
	D308 42 00 00 i H 00 00 60	" 1N4002	"	DS1-00012
	D309 42 00 00 i F 00 06 70	" 1S2473	"	DS1-00008
	D310 42 00 00 i H 00 00 60	" 1N4002	"	DS1-00012
	D311 312 42 00 00 i F 00 06 70	" 1S2473	"	DS1-00008
	D315 316 42 00 00 i H 00 00 60	" 1N4002	"	DS1-00012
	D317 42 00 00 i F 00 06 70	" 1S2473	"	DS1-00008
	L.P.F 1,2 32 00 00 SX 70 01 90	Low-PASS Filter VSL-221G85	ローパスフィルタ	T4-28087
※	BIAS OSC.Coil 32 00 00 SX 70 67 70	BIAS, OSC Coil	バイアス発振コイル	T4-28211
	L101 102 32 00 00 SX 70 20 90	Fixed Inductor 12mH	固定インダクタ(トラップ用)	T4-28090
	L103 32 00 00 SX 70 67 50	" 15mH	"	T4-8866
	L104 32 00 00 SX 70 67 60	" 12mH	"	T4-18270
	L201 202 32 00 00 SX 70 20 90	" 12mH	" (トラップ用)	T4-28090
	L203 32 00 00 SX 70 67 50	" 15mH	"	T4-8866
	L204 32 00 00 SX 70 67 60	" 12mH	"	T4-18270

✧ : New Parts

Ref No.	Part No.	Description	部 品 名	Remarks
✧	32 00 00 SX 70 67 80	Variable Resistor 50KB	ボリューム(2軸2連24φ)	MIC,LINE用
✧	32 00 00 SX 70 67 90	" 5KB	ボリューム(1軸2連16φ)	ECHO用
✧	32 00 00 SX 70 68 00	" 500ΩB	ボリューム(単連16φ)	BIAS用
✧	32 00 00 SX 70 68 10	" 50KD	ボリューム(単連12φ)	REC,LEVEL用
✧	32 00 00 SX 70 68 20	Push Switch	ブッシュSW(4連)	
✧	32 00 00 SX 70 68 30	"	ブッシュSW(単連)	MONITOR用
✧	32 00 00 SX 70 68 40	Mic JACK	2連マイクジャック	
VR101	42 00 00 SX 98 40 20	Semi Fixed Resistor 20KB 8φ	半固定ボリューム	T4-7929
VR102	42 00 00 SX 98 40 10	" 5KB 8φ	"	T4-7904
VR103 104	42 00 00 SX 98 40 20	" 20KB 8φ	"	T4-7929
VR105	42 00 00 SX 99 67 90	" 100KB	"	T4-7799
VR201	42 00 00 SX 98 40 20	" 20KB 8φ	"	T4-7929
VR202	42 00 00 SX 98 40 10	" 5KB 8φ	"	T4-7904
VR203 204	42 00 00 SX 98 40 20	" 20KB 8φ	"	T4-7929
VR205	42 00 00 SX 99 67 90	" 100KB	"	T4-7929
VR301	32 00 00 SX 70 68 50	" 1KB	"	T4-8297
✧ R301 302	42 00 00 HL 42 53 90	Metal Oxide Film Resistor 390Ω (2W)	酸化皮膜抵抗	RM2-33391C
✧ R303 304	42 00 00 HL 41 52 20	" 220Ω (1W)	"	RM2-30221C
F2	42 00 00 KB 00 03 50	Fuse 2A, 250V	ヒューズ	
F3 F4	42 00 00 KB 00 03 10	" 0.5A, 250V	"	
	42 00 00 IG 03 04 50	Hole IC DN6838	ホールIC	T4-28093
✧	42 00 00 FA 15 41 20	Mylar Capacitor 0.012μF 50V	マイラーコンデンサ	
✧	42 00 00 FA 15 36 80	" 0.0068μF 50V	"	
✧	42 00 00 FA 11 31 00	" 0.001μF 50V	"	
✧	32 00 00 SX 70 68 60	Polypropylene Film Capacitor 0.0047μF 50V	ポリプロピレンコンデンサ	
✧	32 00 00 SX 70 68 70	" 0.027μF 50V	"	
✧	42 00 00 FA 11 35 60	Mylar Capacitor 0.0056μF 50V	マイラーコンデンサ	
✧	42 00 00 FA 15 51 00	" 0.1μF 50V	"	
✧	42 00 00 FA 15 44 70	" 0.047μF 50V	"	
✧	42 00 00 FA 15 42 20	" 0.022μF 50V	"	
✧	32 00 00 SX 70 68 80	Polypropylene Film Capacitor 0.015μF 50V	ポリプロピレンコンデンサ	
✧	42 00 00 FA 15 31 80	Mylar Capacitor 0.0018μF 50V	マイラーコンデンサ	
✧	42 00 00 FA 15 32 20	" 0.0022μF 50V	"	
✧	42 00 00 FA 15 32 70	" 0.0027μF 50V	"	
✧	32 00 00 SX 70 68 90	Polypropylene Film Capacitor 0.0056μF 50V	ポリプロピレンコンデンサ	
	42 00 00 FG 71 24 70	Ceramic Capacitor 470PF 50V	セラミックコンデンサ	
	42 00 00 FG 21 21 00	" 100PF 50V	"	
	42 00 00 FG 21 12 20	" 22PF 50V	"	
	42 00 00 FG 71 25 60	" 560PF 50V	"	
	42 00 00 FG 74 41 00	" 0.01μF 50V	"	
	42 00 00 FG 71 31 00	" 0.001μF 50V	"	
	42 00 00 FG 21 14 70	" 47PF 50V	"	
	32 00 00 SX 70 69 00	Mica Capacitor 220PF 50V	シルバードマイコンデンサ	
	42 00 00 FA 15 34 70	Mylar Capacitor 0.0047μF 50V	マイラーコンデンサ	
	32 00 00 SX 70 69 10	Styrol Capacitor 180PF 50V	スチロールコンデンサ	

※ : New Parts

Ref No.	Part No.	Description	部 品 名		Remarks
※	42 00 00 FJ 14 64 70	Electrolytic Capacitor 4.7 μ F/16V	電解コンデンサ		
※	42 00 00 FJ 13 71 00	" 10 μ F/16V	"		
※	42 00 00 FJ 11 74 70	" 47 μ F/6.3V	"		
※	42 00 00 FJ 16 73 30	" 33 μ F/50V	"		
※	42 00 00 FJ 13 73 30	" 33 μ F/16V	"		
※	42 00 00 FJ 14 54 70	" 0.47 μ F/16V	"		
※	42 00 00 FJ 26 63 30	" 3.3 μ F/50V	"		
※	42 00 00 FJ 23 74 70	" 47 μ F/16V	"		
※	42 00 00 FJ 23 91 00	" 1000 μ F/16V	"		
※	42 00 00 FJ 24 84 70	" 470 μ F/25V	"		
※	42 00 00 FJ 13 84 70	" 470 μ F/16V	"		
※	42 00 00 FJ 16 61 00	" 1 μ F/50V	"		
※	42 00 00 FJ 46 52 20	" 0.22 μ F/50V	"		
	42 00 00 HK 15 71 00	Carbon Resistor 10K Ω (1/4W)	カーボン抵抗		
	42 00 00 HK 15 51 00	" 100 Ω (1/4W)	"		
	42 00 00 HK 15 82 70	" 270K Ω (1/4W)	"		
	42 00 00 HK 15 81 00	" 100K Ω (1/4W)	"		
	42 00 00 HK 15 74 70	" 47K Ω (1/4W)	"		
	42 00 00 HK 15 63 30	" 3.3K Ω (1/4W)	"		
	42 00 00 HK 15 61 00	" 1K Ω (1/4W)	"		
	42 00 00 HK 15 82 00	" 200K Ω (1/4W)	"		
	42 00 00 HK 15 64 70	" 4.7K Ω (1/4W)	"		
	42 00 00 HK 15 72 20	" 22K Ω (1/4W)	"		
	42 00 00 HK 15 72 70	" 27K Ω (1/4W)	"		
	42 00 00 HA 15 36 80	" 6.8 Ω (1/4W)	"		
	42 00 00 HK 15 51 50	" 150 Ω (1/4W)	"		
	42 00 00 HJ 15 76 80	" 68K Ω (1/4W)	"		
	42 00 00 HK 15 65 60	" 5.6K Ω (1/4W)	"		
	42 00 00 HK 15 63 90	" 3.9K Ω (1/4W)	"		
	42 00 00 HK 15 51 80	" 180 Ω (1/4W)	"		
	42 00 00 HK 15 71 20	" 12K Ω (1/4W)	"		
	42 00 00 HK 15 66 80	" 6.8K Ω (1/4W)	"		
	42 00 00 HK 15 62 20	" 2.2K Ω (1/4W)	"		
	42 00 00 HJ 15 91 00	" 1M Ω (1/4W)	"		
	42 00 00 HK 15 53 30	" 330 Ω (1/4W)	"		
	42 00 00 HK 15 41 00	" 10 Ω (1/4W)	"		
	42 00 00 HK 15 73 30	" 33K Ω (1/4W)	"		
	42 00 00 HK 15 68 20	" 8.2K Ω (1/4W)	"		
	42 00 00 HK 15 34 70	" 4.7 Ω (1/4W)	"		
	42 00 00 HK 35 93 30	" 3.3M Ω (1/4W)	"		
	42 00 00 HK 15 73 90	" 39K Ω (1/4W)	"		
	42 00 00 HK 15 56 80	" 680 Ω (1/4W)	"		
	42 00 00 HK 15 54 70	" 470 Ω (1/4W)	"		
	42 00 00 HK 15 82 20	" 220K Ω (1/4W)	"		
	42 00 00 HK 15 71 50	" 15K Ω (1/4W)	"		
	42 00 00 HK 15 84 70	" 470K Ω (1/4W)	"		