

# HITACHI

## SERVICE MANUAL

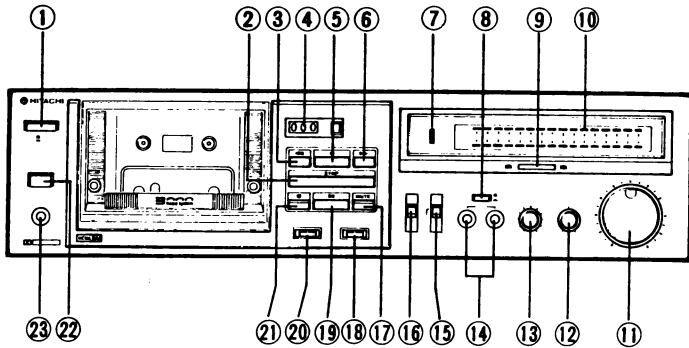
TK

No. 1561E

# D-E65

(U, C, FS, BS, AU, W)

The microprocessor (MB8844-340M) mounted in this unit is the same as that of the model D-E55. Their peripheral circuits are partially different, however, they have basically the same functions, so refer to the D-E55 technical information manual (No. 1471) for servicing this unit.



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### KEY TO ILLUSTRATIONS

- |                             |                             |
|-----------------------------|-----------------------------|
| ① Power (Mains) switch      | ⑬ Output level control      |
| ② Stop button               | ⑭ Microphone sockets        |
| ③ Rewind button             | ⑮ Dolby NR switch           |
| ④ Tape counter              | ⑯ Tape select switch        |
| ⑤ Playback button           | ⑰ REC. Mute button          |
| ⑥ Fast forward button       | ⑱ Timer switch              |
| ⑦ Dolby NR indicator        | ⑲ Pause button              |
| ⑧ Input select switch       | ⑳ Auto/Memory rewind switch |
| ⑨ Monitor switch            | ㉑ Record button             |
| ⑩ Digital peak meter        | ㉒ Eject button              |
| ⑪ Recording level control   | ㉓ Headphone socket          |
| ⑫ Recording balance control |                             |

### SAFETY PRECAUTION

The following precautions should be observed when servicing.

- Since many parts in the unit have special safety related characteristics, always use genuine Hitachi's replacement parts. Especially critical parts in the power circuit block should not be replaced with other makes. Critical parts are marked with  $\Delta$  in the schematic diagram and circuit board diagram.
- Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

## STEREO CASSETTE TAPE DECK

May 1981

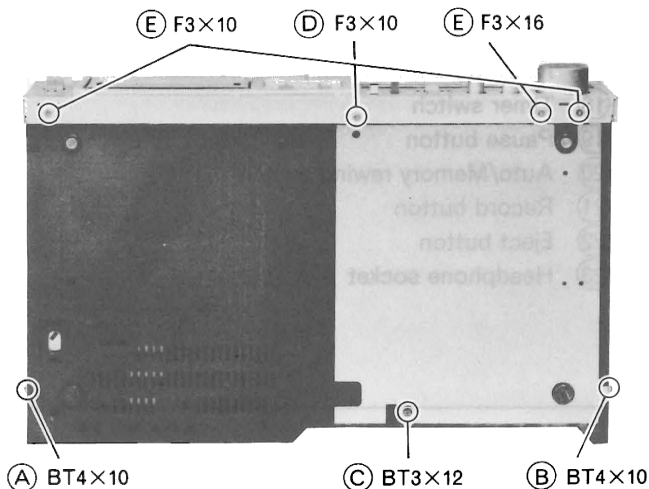
TOKAI WORKS

## SPECIFICATIONS

Semi-conductors :		Dolby NR ON :	68 dB (Weighted A, Reference 3% THD Metal Tape)
Module :	1		67 dB*
ICs :	4	Wow and Flutter :	0.04% (WRMS)
Transistors :	36 (U, C)		0.13%*
	39 (FS, BS, AU, W)	Input Sensitivity and Impedance :	
Diodes :	47	Microphone :	0.3mV, 300 ohms~5k ohms
LEDs :	6	Line in :	60mV, 50k ohms or more
Track System :	4 track 2 channel stereo	DIN (Record/Playback) :	0.3mV, 3.3k ohms (FS, BS, AU, W)
Tape :	Cassette tape (C-30, 60, 90)	Output Level :	500mV
Tape Speed :	4.75 cm/s	Output Load Impedance :	
Recording System and		Line out :	50k ohms or more
Bias Frequency :	AC bias, 85 kHz	DIN (Record/Playback) :	50k ohms or more (FS, BS, AU, W)
Erasing System :	AC erase	Headphone :	8 ohms~2k ohms
Erase Ratio :	65 dB or more (at 1 kHz)	Distortion :	0.8% (1 kHz, 160nWB/m)
Frequency Response :		Crosstalk :	60 dB or more (at 1 kHz)
ER/UD (NOR) :	20 Hz~18 kHz	Channel Separation :	30 dB or more (at 1 kHz)
	30 Hz~16 kHz ( $\pm 3$ dB)	Power Supply :	AC 120V, 60 Hz (U, C)
	30 Hz~17 kHz*		AC 100-110V/115-127V/ 200-220V/230-250V, 50/60 Hz (W)
EX/SX (CrO <sub>2</sub> ) :	20 Hz~19 kHz		AC 220V, 50 Hz (FS)
	30 Hz~17 kHz ( $\pm 3$ dB)		AC 240V, 50 Hz (BS, AU)
	30 Hz~18 kHz*	Power Consumption :	22W
ME (Metal) :	20 Hz~20 kHz	Dimensions :	110(H) $\times$ 435(W) $\times$ 266(D)mm
	30 Hz~18 kHz ( $\pm 3$ dB)	Weight :	4.7kg
	30 Hz~19 kHz*	Motor :	Electronically controlled DC motor
FeCr :	20 Hz~18 kHz	Heads :	Cross gap metal R & P head Ferrite metal Erase head
	30 Hz~17 kHz ( $\pm 3$ dB)		
	30 Hz~17 kHz*		
S/N (Signal to Noise Ratio) :			
Dolby NR OFF :	60 dB (Weighted A, Reference 3% THD Metal Tape)		
	59 dB*		

\*According to DIN 45 500

## DISASSEMBLY



## 1. Cassette door

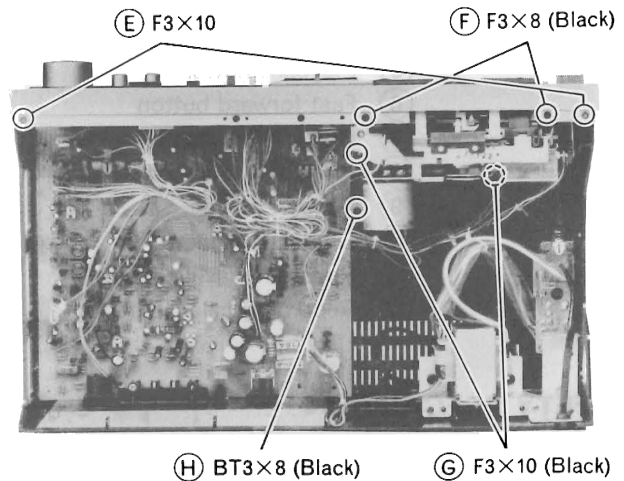
Depress the eject button to open the cassette holder.  
Lift up the cassette door to remove it.

## 2. Upper cover

Remove (A) and (B) (two) screws.

## 3. Bottom cover

Remove (B), (C) and (D) (three) screws.



## 4. Front panel

1) Remove three knobs (Recording level, Output level and Recording balance).

2) Remove (D), (E) and (F) (eight) screws.

## 5. Cassette chassis

1) Remove (F) and (G) (four) screws.

2) Remove (H) screw.

### ADJUSTMENT

Perform the following adjustments in the sequence stated after cleaning the head, pressure roller and capstan with a head cleaning stick moistened in alcohol. Also, unless specially indicated otherwise, set the switches and controls to the positions indicated in the table.

Symbol No.	Switches and Controls	Position	Symbol No.	Switches and Controls	Position
S1	Monitor switch	TAPE	RV1L, R	Record level control	Max.
S2	Dolby NR switch	OFF	RV2L, R	Output level control	Max.
S3	Tape select switch	ER/UD (NOR)	RV3	Record balance control	Center
S4	Input select switch	LINE			

Item	Adjustments	Measuring Instrument and Connection			Check Tape	Mode	Adjusted Position	Adjusted Value	Remarks
		Measuring Instrument	Input Terminal	Output Terminal					
1	Tape speed	• Frequency counter	—	LINE OUT	MTT-111, 3000 Hz (3150 Hz*)	Playback	Semi-variable resistor in the motor	3000 Hz +30 Hz -10 Hz (3150 Hz*)	See Note 1
2	Head azimuth	• VTVM	—	LINE OUT	MTT-316, 12.5 kHz	Playback	Azimuth adjusting screw	Output Max.	See Note 2
3	Digital peak meter	• Audio oscillator (400Hz) • VTVM	LINE IN	TP1L, R	—	Record	RT4L, R	Digital peak meter indicates 0 dB	See Note 3
4	Dolby NR	• Audio oscillator (5 kHz) • VTVM	LINE IN	TP1L, R	—	Record	RT2L, R	Level is boosted by 8 dB	See Note 4
5	Playback gain	—	—	—	MTT-150, 400 Hz, 20m Maxwell	Playback	RT1L, R	Digital peak meter indicates 0 dB	See Note 5
6	Bias current	Set RT5L, R to the center.			ER/UD tape	Record	RT3L, R	Output difference within 1 dB	See Note 6
		• Audio oscillator (1.2 kHz/12 kHz, 0dB-23dB) • Attenuator • VTVM	LINE IN	LINE OUT					
7	Record/playback output	• Audio oscillator (400 Hz) • VTVM	LINE IN	LINE OUT	ER/UD tape	Record	RT5L, R	Digital peak meter indicates 0 dB	See Note 7

\* According to DIN 45 500

**Note :**

- Adjust within 30 sec. after heat-running for more than 20 minutes.
- When the maximum values of both channels are different, tune to the maximum value of the L channel. In this case, the difference between the maximum values of both channels should be within 2 dB.

- 1) Set the monitor switch to the SOURCE position.  
2) Feed a 400 Hz signal to the LINE IN jacks in the recording mode and adjust the audio oscillator output so that the level of TP1L, R become 775 mV.  
3) Then, adjust RT4L, R so that the digital peak meter indicates 0 dB.

- 1) Set the monitor switch to the SOURCE position.  
2) Feed a 5 kHz signal to the LINE IN jacks in the recording mode and adjust the audio oscillator output so that the level of TP1L, R become -30.4 dBm (23.5mV).  
3) Then, adjust RT2L, R so that the level is boosted by 8 dB when the Dolby NR switch is set to ON.
- Playback a test tape (MTT-150, 400 Hz 20m Maxwell) and adjust RT1L, R so that the digital peak meter indicates 0 dB.
- 1) Use Hitachi ER/UD tape.  
2) Set RT5L, R to the center.  
3) Set the monitor switch to the SOURCE position and feed a 1.2 kHz signal to the LINE IN jacks in the recording mode.  
4) Adjust the audio oscillator output so that the digital peak meter indicates 0 dB. Then, adjust the attenuator to lower the output level by 23 dB.

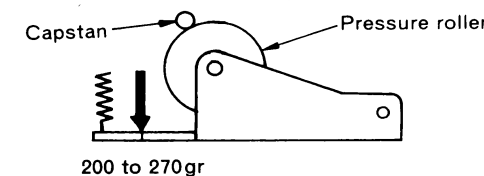
- Set the monitor switch to the TAPE position and read the playback output level of LINE OUT jacks.
- Then, set the audio oscillator frequency to 12 kHz and read the playback output level of LINE OUT jacks.
- Adjust RT3L, R so that the output level difference between two frequencies is within 1 dB.
- 1) Use Hitachi ER/UD tape.  
2) Set the monitor switch to the SOURCE position and feed a 400 Hz signal to the LINE IN jacks in the recording mode.  
3) Adjust the audio oscillator output so that the level of LINE OUT jacks become 730mV.  
4) Set the monitor switch to the TAPE position and adjust RT5L, R so that the digital peak meter indicates 0 dB.

### INSPECTION OF MECHANISM

Check Item		Reference Value	Remarks
1	Pressure of pressure roller	200 to 270gr	Note 1
2	Torque	Take-up	35 to 65 gr-cm Measure in playback mode
		Fast forward	75 to 110 gr-cm Measure in fast forward mode
		Rewind	75 to 110 gr-cm Measure in rewind mode
3	Back-tension	Take-up turntable	1.7 to 4.5gr-cm Measure in playback mode
		Supply turntable	1.7 to 4.5gr-cm Measure in playback mode
4	Brake-torque	Take-up turntable	50 to 100gr-cm Measure in stop mode
		Supply turntable	

**Note 1. Pressure of pressure roller**

Set this unit in the playback mode and press the pressure roller in the direction of the arrow using a fan type tension gauge, and measure the pressure when the pressure roller is released from the capstan.

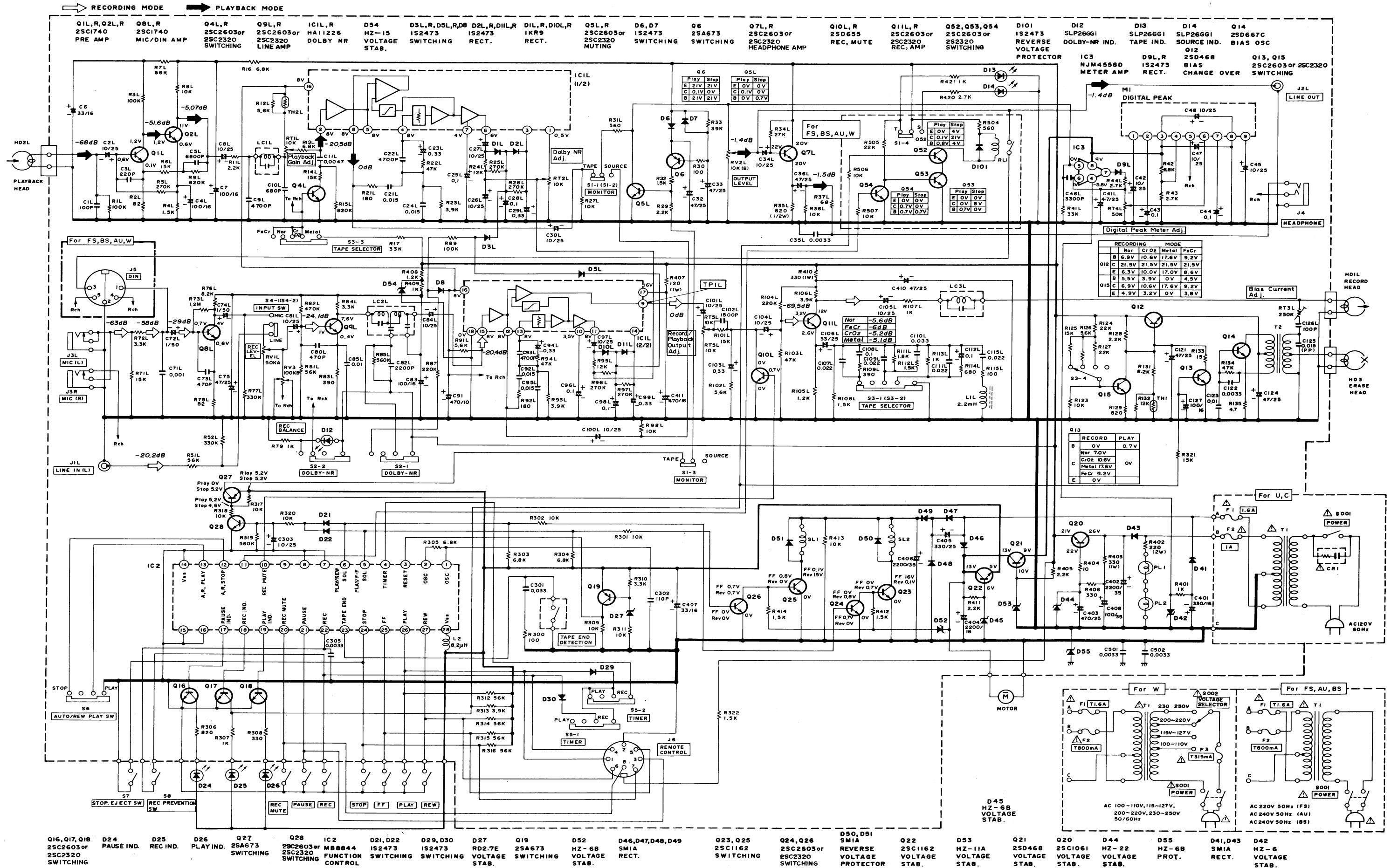


### LUBRICATIONS

Lubricate one or two drops of oil to rotating point or lubricate grease to sliding point.  
Lubricate the respective parts listed once every 1000 hours or once a year under normal conditions of use.  
Avoid oiling them excessively, or rotation may become irregular because of oil splashes.

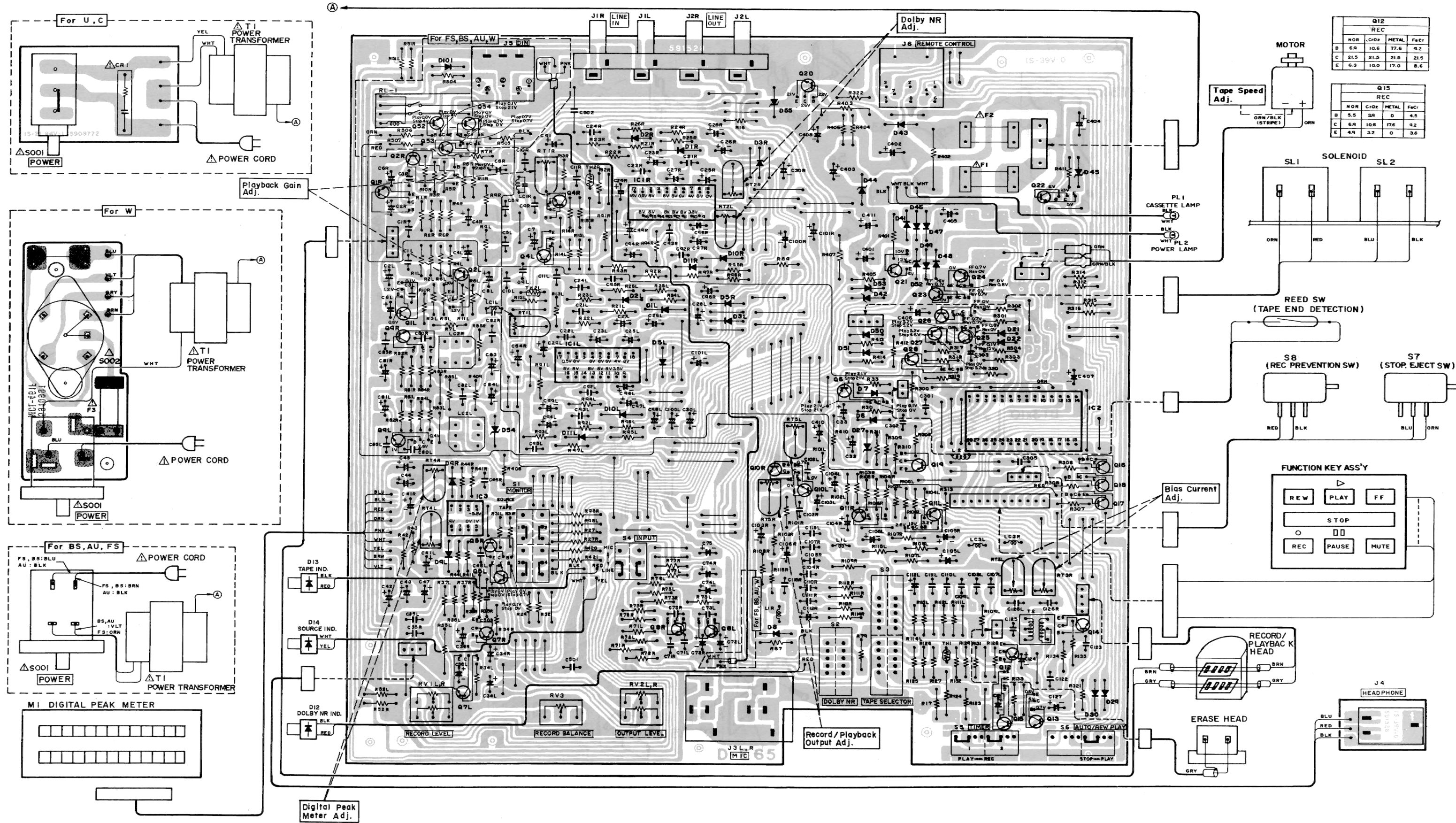
Lubrication		Oil or Grease
Rotary section	Metal and metal	Pan motor oil (10W-40)
	Mold and metal	Sonic slider oil (#1600)
Sliding section	Metal and metal	Hitasol (MO-138)
	Mold and mold Mold and metal	White grease (FL-LUBE-A)
Spring resonance prevention		Froil (GB-TS-1)

# SCHEMATIC DIAGRAM





# CIRCUIT BOARD DIAGRAM



Q12 REC				
NOR	COR	METAL	FeCr	
B	6.4	10.6	17.6	4.2
C	21.5	21.5	21.5	21.5
E	6.3	10.0	17.0	6.6

Q15 REC				
NOR	COR	METAL	FeCr	
B	5.5	3.0	0	4.5
C	6.8	10.6	17.6	4.2
E	4.9	3.2	0	3.6

EXPLODED VIEW (Mechanism-FL-31A)

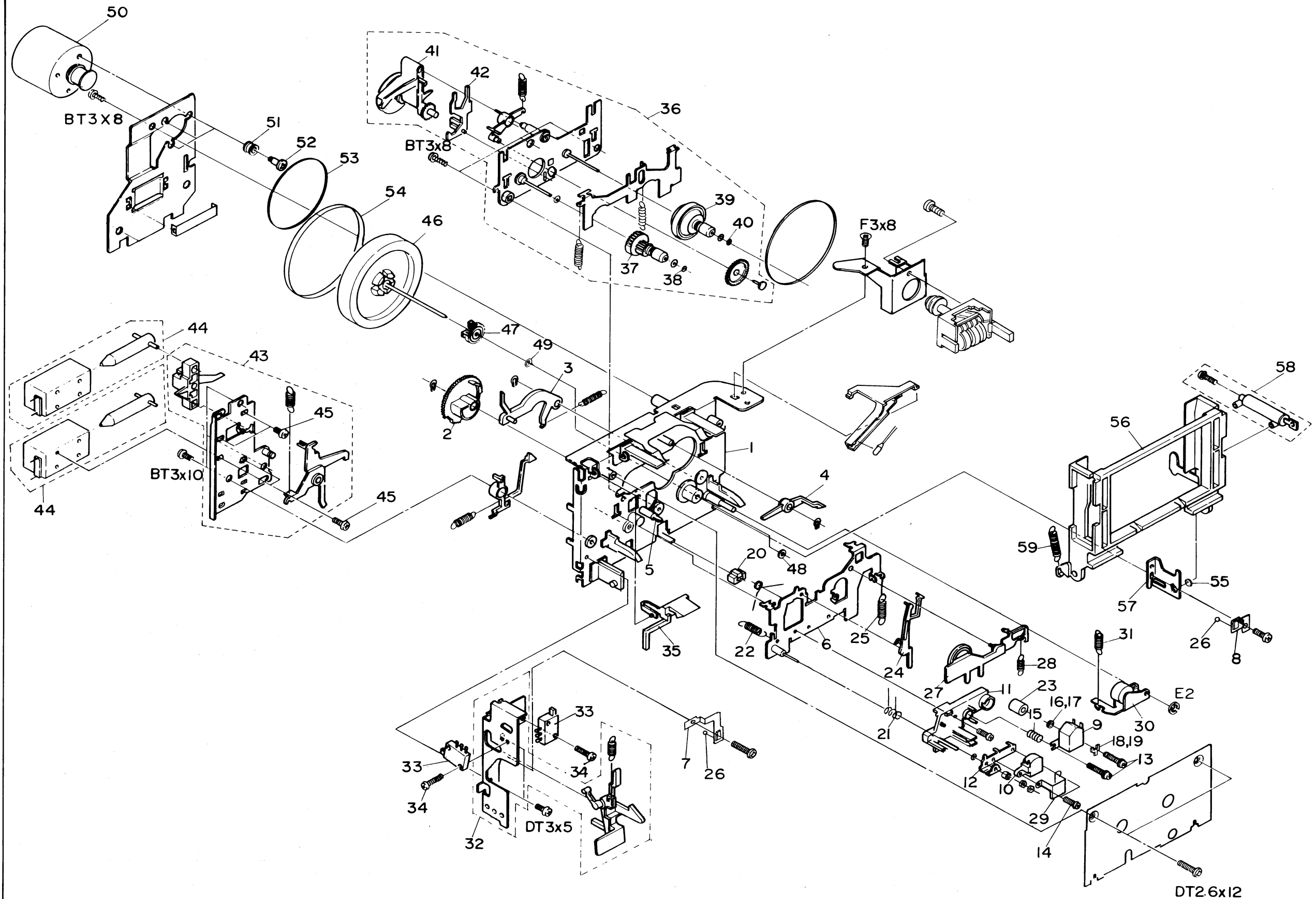
Note

1. Voltage measured at base of chassis with minimum volume control and no signal.
2. Nomenclature of Resistors and Capacitors.

Circuit No.	
Value	No indicated $\Omega$ (Ohm) M : 1000 k $\Omega$
Tolerance	No indicated $\pm 5\%$ K : $\pm 10\%$ M : $\pm 20\%$
Wattage	No indicated $\frac{1}{4}W$
Sort	No indicated Carbon film RC : Composition RW : Wire wound RS : Oxide metal film RN : Fixed metal film

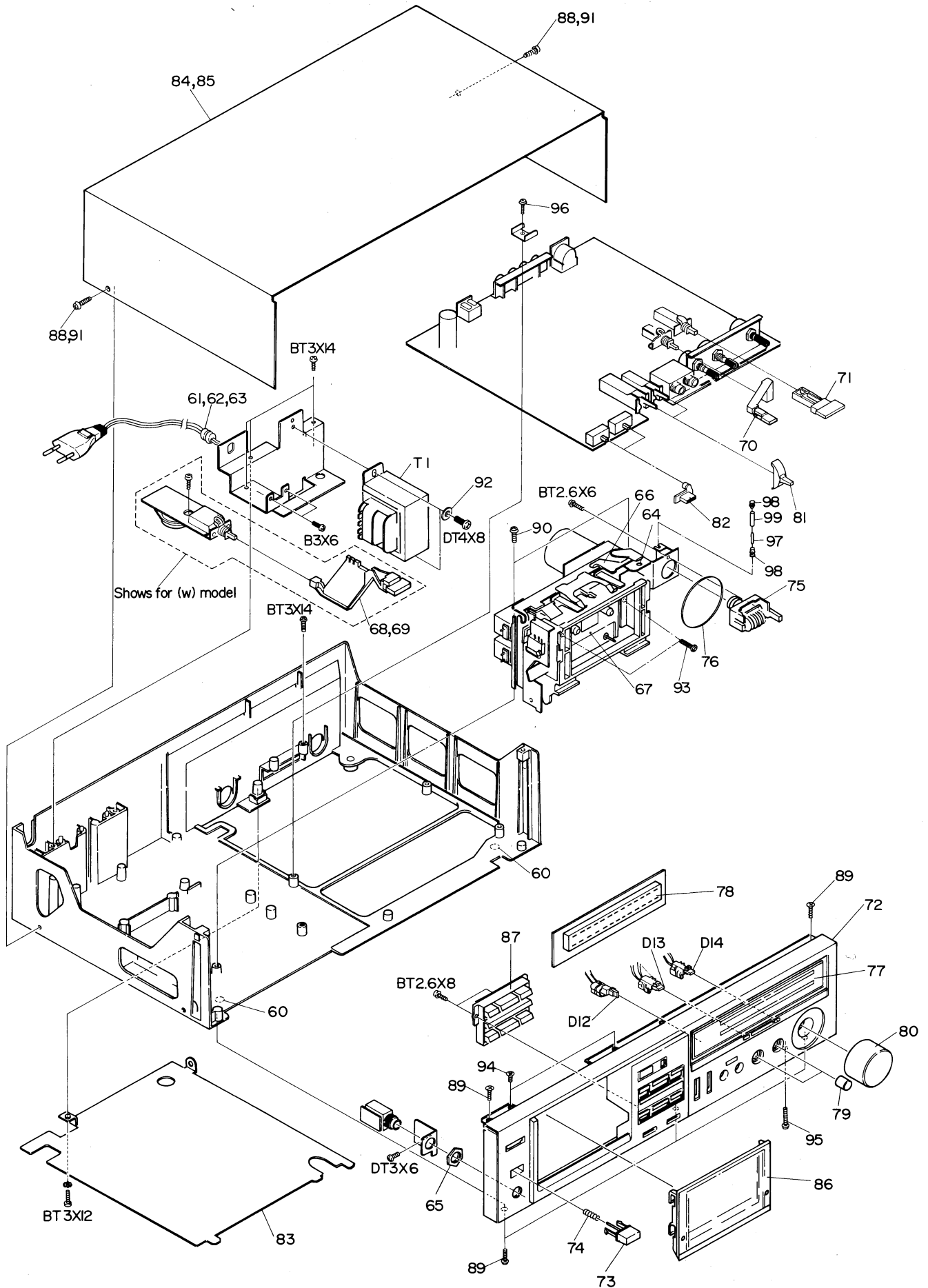
Circuit No.	
Value	No indicated $\mu F$ P : PF
Tolerance	No indicated $\pm 10\%$ J : $\pm 5\%$ M : $\pm 20\%$ Z : +80% , -20% D : $\pm 0.5pF$ C : $\pm 0.25pF$
Sort	Ceramic
	Electrolitic
	Mylar
	Polyester
	Styrol
Voltage	No indicated 50WV

3. Be sure to make your orders of resistors and capacitors with value, voltage, tolerance and sort.
4. When replacing capacitors marked with \*, use specified ones stated on parts list since required temperature characteristics.



Note : Components marked without numbers in this drawing are not specified as replacement parts.

### EXPLODED VIEW (Cabinet)

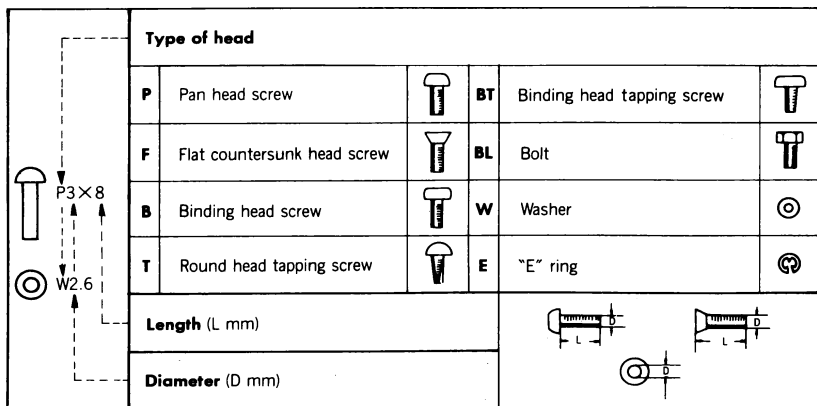


## REPLACEMENT PARTS LIST

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
CAPACITORS					
△ CR1	0219902	CR PACK 120 OHM 0.0033MF 450V (U)	Q 2LR	5321296	TRANSISTOR 2SC1740LN-RS
△ CR1	0219907	CR PACK (C)	Q 4LR	5322623	TRANSISTOR 2SC2320EF
C502	0209023	CERAMIC DISC (RESISTOR SHAPE) 3300P F+-30	Q 5LR	5322623	TRANSISTOR 2SC2320EF
C503	0209023	CERAMIC DISC (RESISTOR SHAPE) 3300P F+-30	Q 6	5320593	TRANSISTOR 2SA673C
RESISTORS					
RT 1LR	5007477	SEMI VARIABLE 10K OHM	Q 7LR	5322623	TRANSISTOR 2SC2320EF
RT 2LR	5007477	SEMI VARIABLE 10K OHM	Q 8LR	5321296	TRANSISTOR 2SC1740LN-RS
RT 3LR	5007482	SEMI VARIABLE 250K OHM	Q 9LR	5322623	TRANSISTOR 2SC2320EF
RT 4LR	5007479	SEMI VARIABLE 50K OHM	Q10LR	5322381	TRANSISTOR 2SD655E
RT 5LR	5007477	SEMI VARIABLE 10K OHM	Q11LR	5322623	TRANSISTOR 2SC2320EF
RV 1LR	5000617	VARIABLE RESISTOR 50K OHM (A)	Q12	5321213	TRANSISTOR 2SD468C
RV 2LR	5000872	VARIABLE RESISTOR 10K OHM (B)	Q13	5322623	TRANSISTOR 2SC2320EF
RV 3	5000851	VARIABLE RESISTOR 100K OHM(B)	Q14	5322651	TRANSISTOR 2SD667C
R135	0170473	FUSE RESISTOR 4.7 OHM+-5X	Q15	5322623	TRANSISTOR 2SC2320EF
SEMI-CONDUCTORS					
D 1LR	5331503	DIODE 1KR9	Q16-18	5322623	TRANSISTOR 2SC2320EF
D 2LR	5330573	DIODE 1S2473	Q19	5320593	TRANSISTOR 2SA673C
D 3LR	5330573	DIODE 1S2473	Q20	5321301	TRANSISTOR 2SC1061
D 5LR	5330573	DIODE 1S2473	Q21	5321213	TRANSISTOR 2SD468C
D 6	5330573	DIODE 1S2473	Q22	5320643	TRANSISTOR SILICON 2SC1162
D 7	5330573	DIODE 1S2473	Q23	5320643	TRANSISTOR SILICON 2SC1162
D 8	5330573	DIODE 1S2473	Q24	5322623	TRANSISTOR 2SC2320EF
D 9LR	5330573	DIODE 1S2473	Q25	5320643	TRANSISTOR SILICON 2SC1162
D 10LR	5331503	DIODE 1KR9	Q26	5322623	TRANSISTOR 2SC2320EF
D 11LR	5330573	DIODE 1S2473	Q27	5320593	TRANSISTOR 2SA673C
D 12	5380362	LED SLP26GG1	Q28	5322623	TRANSISTOR 2SC2320EF
D 13	5380362	LED SLP26GG1	Q52-54	5322623	TRANSISTOR 2SC2320EF (FS,BS,AU,W)
D 14	5380361	LED SLP26UR1	TH 1	5340232	THERMISTER 112103-2
D 21	5330573	DIODE 1S2473	TH 2LR	5340231	THERMISTER 112302-2
D 22	5330573	DIODE 1S2473	TRANSFORMERS		
D 27	5330847	DIODE RD2.7E-B2	△ T 1	5212881	POWER TRANSFORMER (U,C)
D 29	5330573	DIODE 1S2473	△ T 1	5212882	POWER TRANSFORMER (FS)
D 30	5330573	DIODE 1S2473	△ T 1	5212883	POWER TRANSFORMER (BS)
D 41	5331422	DIODE SM-1A-02	△ T 1	5212884	POWER TRANSFORMER (AU)
D 42	5330392	ZENER DIODE SILICON HZ6B	△ T 1	5212885	POWER TRANSFORMER (W)
D 43	5331422	DIODE SM-1A-02	T 2	5260442	BIAS OSCILLATOR
D 44	5331491	ZENER DIODE HZ22-1	COILS		
D 45	5330392	ZENER DIODE SILICON HZ6B	L 1LR	5150363	CHOKE COIL 2.2 MH
D 46-51	5331422	DIODE SM-1A-02	L 2	5152073	CHOKE COIL 8.2MICROH
D 52	5330392	ZENER DIODE SILICON HZ6B	MISCELLANEOUS		
D 53	5330551	ZENER DIODE HZ11A		5658061	LED SOCKET (FOR D12, D13)
D 54	5330541	ZENER DIODE HZ-15		5658071	LED SOCKET (FOR D14)
D 55	5330392	ZENER DIODE SILICON HZ6B	△	5746158	POWER CORD (FS, W)
D101	5330573	DIODE 1S2473 (FS,BS,AU,W)	△	5746342	POWER CORD (BS)
IC 1LR	5350561	IC HA 11226	△	5746442	POWER CORD (U,C)
IC 2	5365473	IC HB8844-340	△	5746571	POWER CORD (AU)
IC 3	5350601	IC NJM4558D	PL1	5762035	PILOT LAMP (FOR CASSETTE ILLUMINATION)
Q 1LR	5321296	TRANSISTOR 2SC1740LN-RS	PL2	5762036	PILOT LAMP (FOR POWER SWITCH)
			△ F 1	5721061	FUSE 1.6A (FS,BS,AU,W)
			△ F 1	5721161	FUSE 1.6A (U,C)

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
MISCELLANEOUS					
△ F 2	5720175	FUSE 0.8A (FS,BS,AU, W)	23	7574847	COLLAR
△ F 2	5721164	FUSE 1A (U,C)	24	6761741	REWIND ARM
△ F 3	5720171	FUSE (W)	25	6301022	SPRING
J1LR, J2LR	5676261	PIN JACK ASSEMBLY (LINE IN, LINE OUT)	26	0948492	BALL - 2MMD
J 3LR	5679742	MIC JACK	27	6761707	TAKE UP IDLER ASSEMBLY
J 4	5674193	HEADPHONE JACK	28	6320578	SPRING FOR TAKE UP IDLER
J 5	5651141	5P DIN SOCKET (FS,BS,AU, W)	29	6990651	INSULATION PLATE FOR HEAD
J 6	5677131	8P DIN SOCKET (REMOTE)	30	7330581	PRESSURE ROLLER ARM ASSEMBLY
LC 1LR	5120562	TRAP COIL	31	6301361	SPRING
LC 2LR	5161665	DOLBY FILTER	32	7330662	EJECT HOLDER ASSEMBLY
LC 3LR	5120562	TRAP COIL	33 (S7, 8)	5633361	PUSH SWITCH
RL 1	5641141	REED RELAY (FS,BS,AU, W)	34	0671310	DT SCREW-2.6MMDX10MM
S 1	5634415	PUSH SWITCH (MONITOR)	35	6761814	RECORD PREVENTION ARM
S 2	5604227	LEVER SWITCH (DOLBY NR)	36	6761696	REEL BASE ASSEMBLY
S 3	5604501	LEVER SWITCH (TAPE SELECTOR)	37	6414202	TURNTABLE ASSEMBLY (SUPPLY)
S 4	5634415	PUSH SWITCH (INPUT)	38	7778185	POLY SLIDER WASHER
S 5	5624281	SLIDE SWITCH (TIMER)	39	6414213	TURNTABLE ASSEMBLY (TAKE UP)
S 6	5624281	SLIDE SWITCH (AUTO REWIND)	40	7778185	POLY SLIDER WASHER
△ S001	5633482	PUSH SWITCH (POWER)(U, C)	41	6761672	FF/REWIND ARM ASSEMBLY
△ S001	5633541	PUSH SWITCH (POWER)(FS, BS, AU)	42	6761732	SELECT SLIDER
△ S001	5633641	PUSH SWITCH (POWER)(W)	43	7330726	SOLENOID PLATE ASSEMBLY
△ S002	5605083	ROTARY SWITCH (VOLTAGE SELECTOR)(W)	44	5642831	DC SOLENOID
FOR ACCESSORIES			45	8741403	BIND SCREW-3MMDX3MM
	7740321	HEAD CLEANING STICK	46	6373751	FLYWHEEL ASSEMBLY
	5895501	PATCH CORD	47	6430932	FLYWHEEL GEAR
△	5662021	SOCKET ADAPTER (W)	48	7786623	POLY SLIDER WASHER
FOR CASSETTE DECK ASSEMBLY (FL-31A)			49	7772623	SPRING
1	7341351	CHASSIS BASE ASSEMBLY	50	5576761	DC MOTOR ASSEMBLY
2	6430886	PLAY GEAR	51	6589591	RUBBER PLATE
3	6761783	PLAY ARM	52	7539007	SPECIAL SCREW
4	6761821	PICK UP ARM	53	6355193	BELT
5	7740246	FELT	54	6357301	FLYWHEEL BELT
6	7339092	HEAD PLATE ASSEMBLY	55	7779793	POLYESTER WASHER
7	7339801	HEAD PLATE HOLDER (A)	56	6761844	CASSETTE HOLDER
8	7339811	HEAD PLATE HOLDER (B)	57	7330602	CASSETTE HOLDER SUPPORT
9	5449011	RECORD PLAYBACK HEAD	58	6763431	DAMPER ASSEMBLY
10	5445351	ERASE HEAD	59	6301723	SPRING FOR EJECT SLIDER
11	6765393	HEAD BASE	MISCELLANEOUS		
12	7336803	ERASE HEAD PLATE	60	7740603	FELT LEG
13	7775211	SPECIAL SCREW	△ 61	0043793	BUSHING (U,C,AU)
14	8741105	BIND SCREW	△ 62	6711351	BUSHING (BS)
15	6321733	HEAD SPRING C	△ 63	6794081	BUSHING (FS, W)
16	7771441	WASHER - 2 MMD	64	7779977	WASHER
17	7771442	WASHER-2MMD	65	7772951	NUT
18	7332761	HEAD SPACER	66	6761962	LAMP HOLDER
19	7332762	HEAD SPACER	67	6633913	CASSETTE METAL ASSEMBLY
20	6581042	RUBBER FOR RECORD PREVENTION	68	6290751	PUSH BUTTON ASSEMBLY (POWER)(U, C, FS, BS, AU)
21	6546831	SPRING FOR ERASE HEAD	69	6290752	PUSH BUTTON ASSEMBLY (POWER) (W)
22	6302375	SPRING	70	6764932	PUSH BUTTON ASSEMBLY (INPUT)
			71	6767111	PUSH BUTTON ASSEMBLY (MONITOR)
			72	6224782	FRONT PANEL ASSEMBLY

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
MISCELLANEOUS			86	6093331	CASSETTE DOOR ASSEMBLY
73	6053532	EJECT BUTTON ASSEMBLY	87	5639501	FUNCTION SWITCH ASSEMBLY WITH BUTTON
74	6303115	SPRING FOR EJECT BUTTON	88	8699610	BT BIND SCREW-4MMDX10MM (U,C)
75	5559443	COUNTER	89	7781581	BT FLAT SCREW-3MMDX10MM
76	6354471	COUNTER BELT	90	7781582	FLAT SCREW-3MMDX10MM (BLACK)
77	6767021	LED FRAME ASSEMBLY	91	7781731	BT BIND SCREW-4MMDX10MM (FS,BS,AU,W)
78	5310521	LED METER	92	0626577	SPECIAL WASHER
79	6288303	KNOB ASSEMBLY-12MMD (REC BALANCE, OUTPUT)	93	0678312	DT SCREW-2.6MMDX12MM (BLACK)
80	6288183	KNOB ASSEMBLY-38MMD (REC LEVEL)	94	8602408	DT FLAT SCREW-3MMDX8MM (BLACK)
81	6299221	LEVER KNOB (TAPE,DOLBY NR)	95	7781587	BT FLAT SCREW-3MMDX16MM
82	6295611	SLIDE KNOB (AUTO REWIND, TIMER)	96	8699408	BT BIND HEAD SCREW-3MMDX8MM (BLACK)
83	6042804	BOTTOM COVER	97	5641092	REED RELAY
84	6044231	UPPER COVER (FS,BS,AU,W)	98	6576271	RELAY CAP
85	6044232	UPPER COVER (U,C)	99	7575542	TUBE



When ordering hardware excluding stated on these lists, be sure to make your orders with type and size.



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