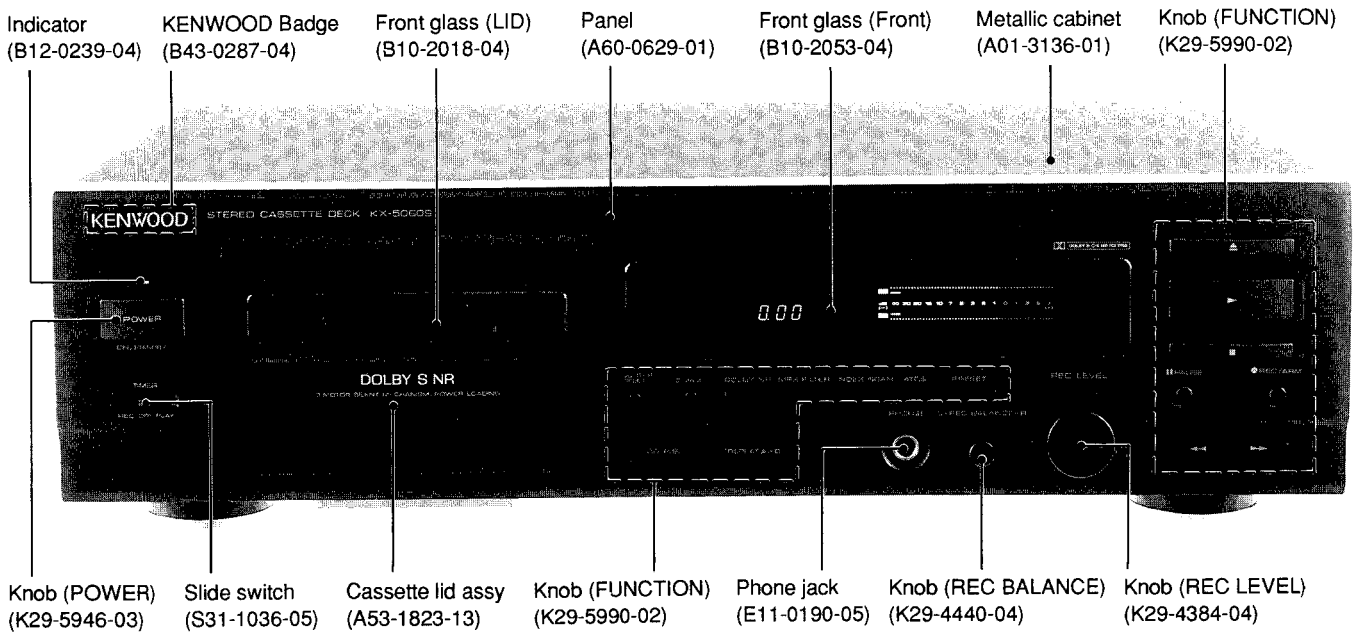
STEREO CASSETTE DECK

KX-5060S

SERVICE MANUAL

KENWOOD

B51-4941-00 (S) 3800



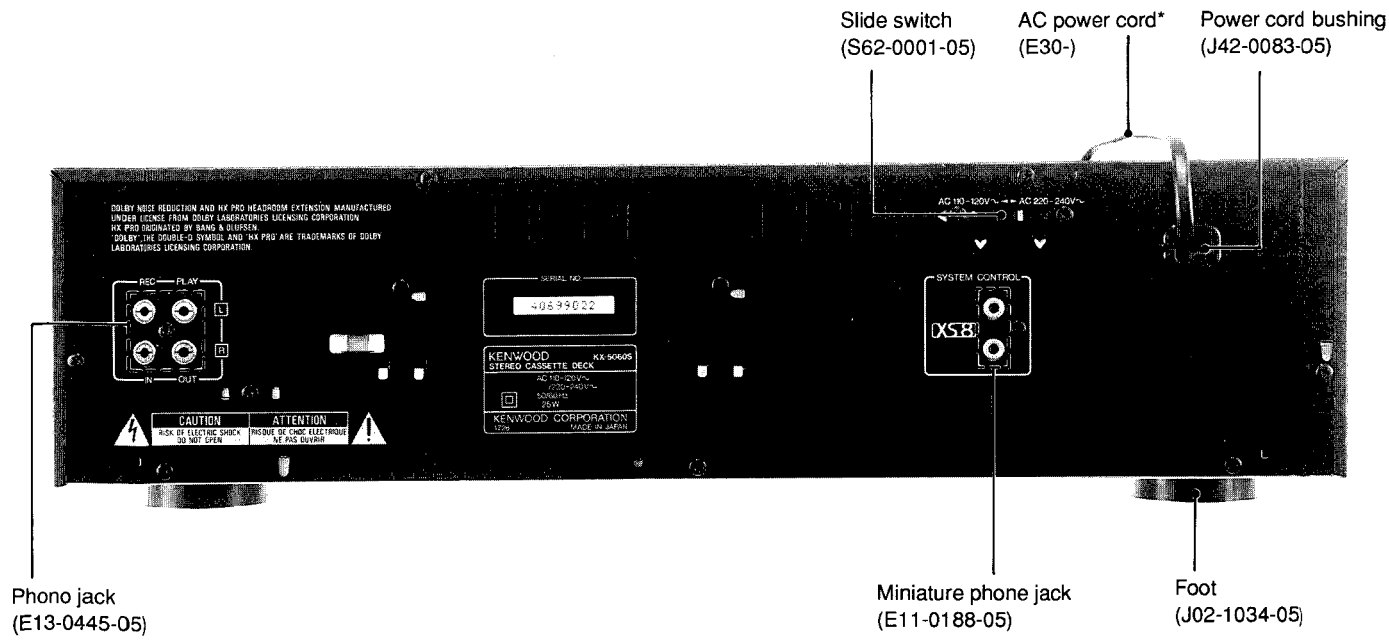


Photo is KX-5060S M type.

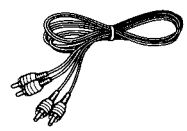
* Refer to parts list on page 37.

KX-5060S

CONTENTS

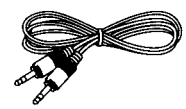
ACCESSORIES

Audio cord 2



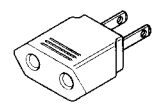
(E30-0505-05)

System control cord 1



(E30-2733-05)

AC plug adaptor 1
(Except for U.S.A., Canada, Europe, U.K., and Australia)
For the unit with a European AC plug in areas other than Europe.



(E03-0115-05)

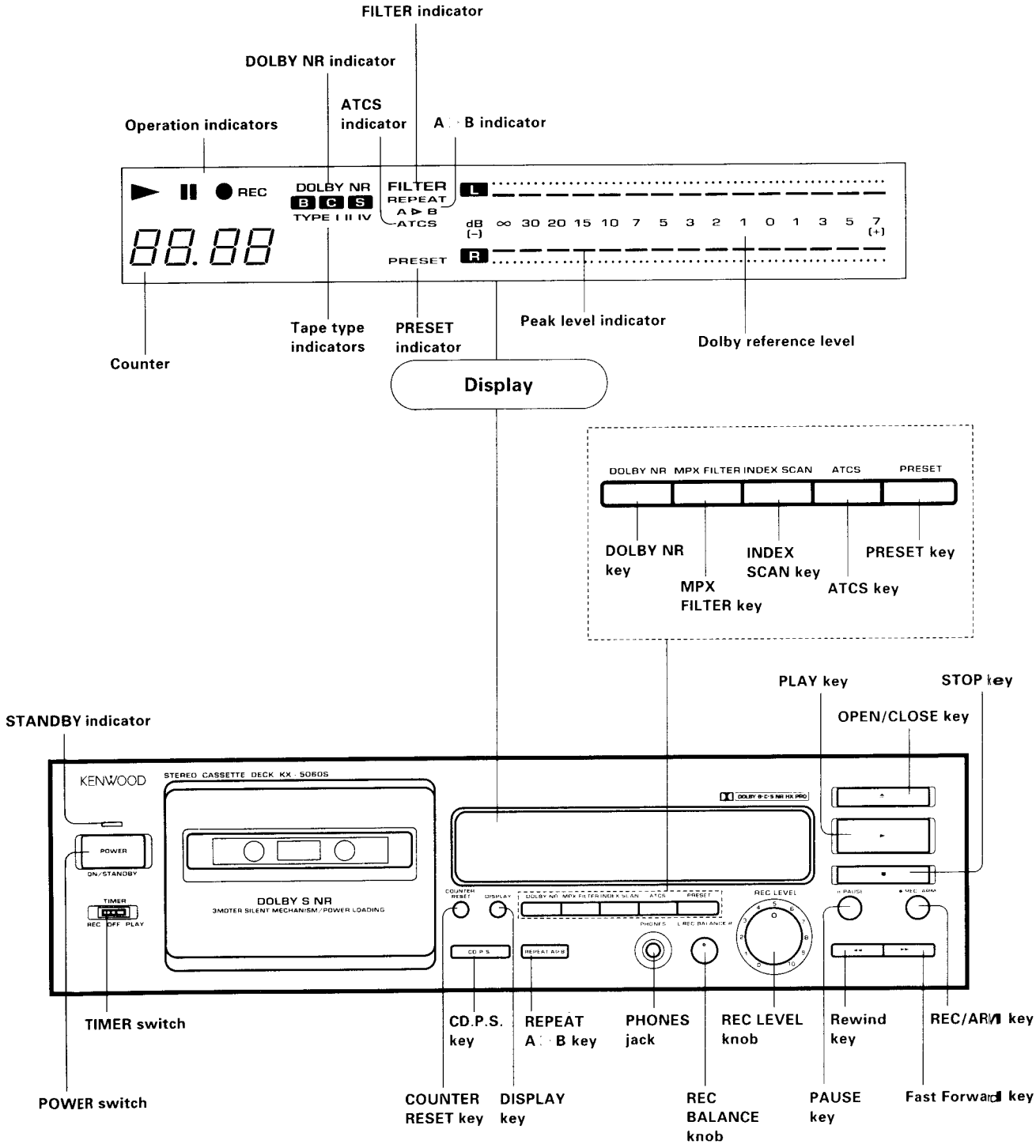
Beware of condensation

When water vapor comes into contact with the surface of cold material, water drops are produced.
If condensation occurs, correct operation may not be possible, or the unit may not function correctly.
This is not a malfunction, however, and the unit should be dried.
(To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions :

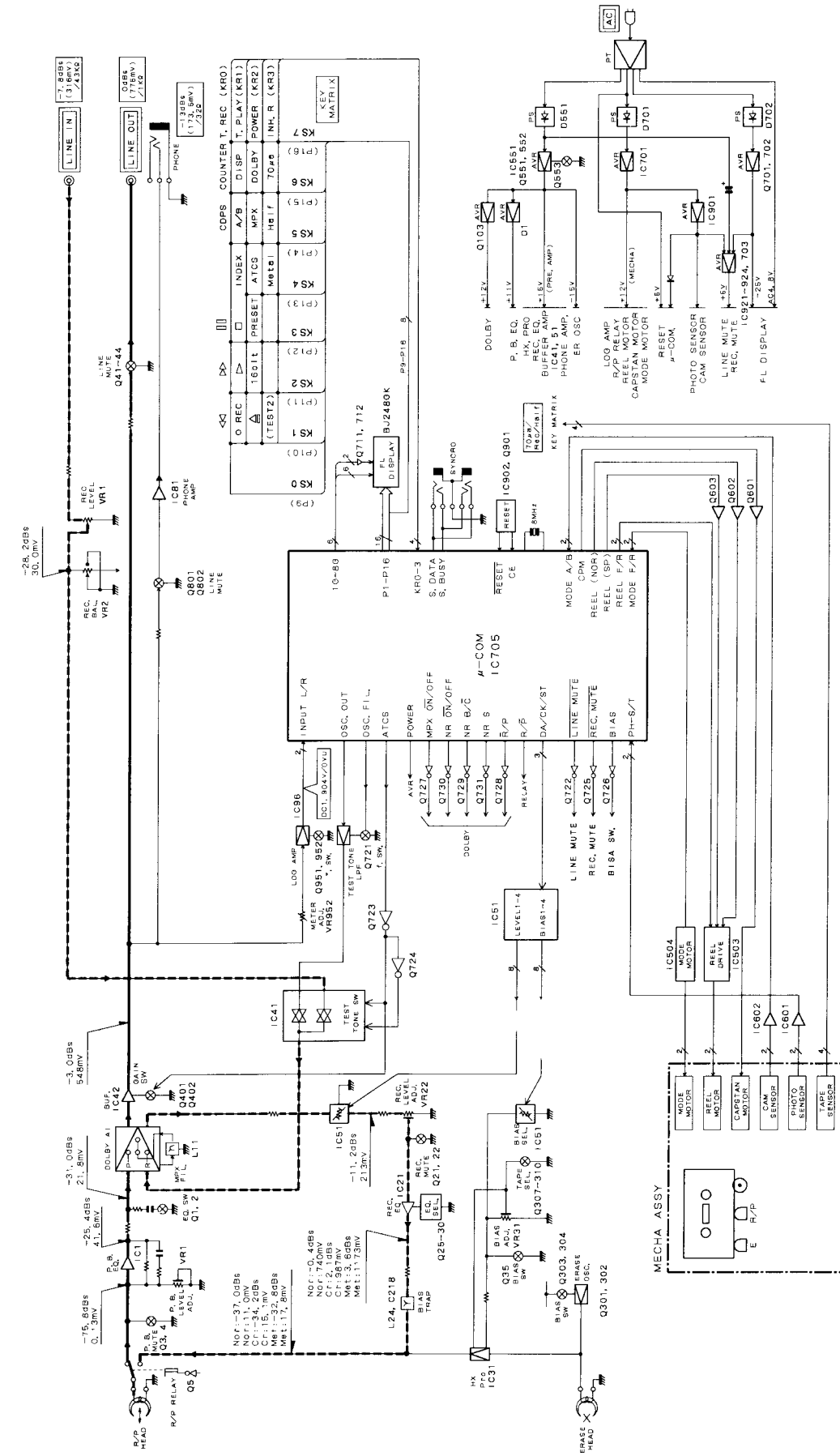
- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.

CONTROL


FILTER indicator
DOLBY NR indicator
ATCS indicator
A B indicator
Operation indicators
REC
DOLBY NR
B C S
TYPE I II IV
FILTER
REPEAT
A B
ATCS
L
R
dB
∞ 30 20 15 10 7 5 3 2 1 0 1 3 5 7
(–)
(+)
PRESET
Counter
Tape type indicators
PRESET indicator
Peak level indicator
Dolby reference level
Display
DOLBY NR MPX FILTER INDEX SCAN ATCS PRESET
DOLBY NR key
MPX FILTER key
INDEX SCAN key
ATCS key
PRESET key
PLAY key
STOP key
OPEN/CLOSE key
STANDBY indicator
KENWOOD
STEREO CASSETTE DECK KX-5060S
POWER
ON/STANDBY
TIMER
REC OFF PLAY
DOLBY S NR
3MOTER SILENT MECHANISM/POWER LOADING
REC LEVEL
TIMER switch
POWER switch
CD.P.S. key
REPEAT A B key
PHONES jack
REC LEVEL knob
Rewind key
REC/ARM key
COUNTER RESET key
DISPLAY key
REC BALANCE knob
PAUSE key
Fast Forward key

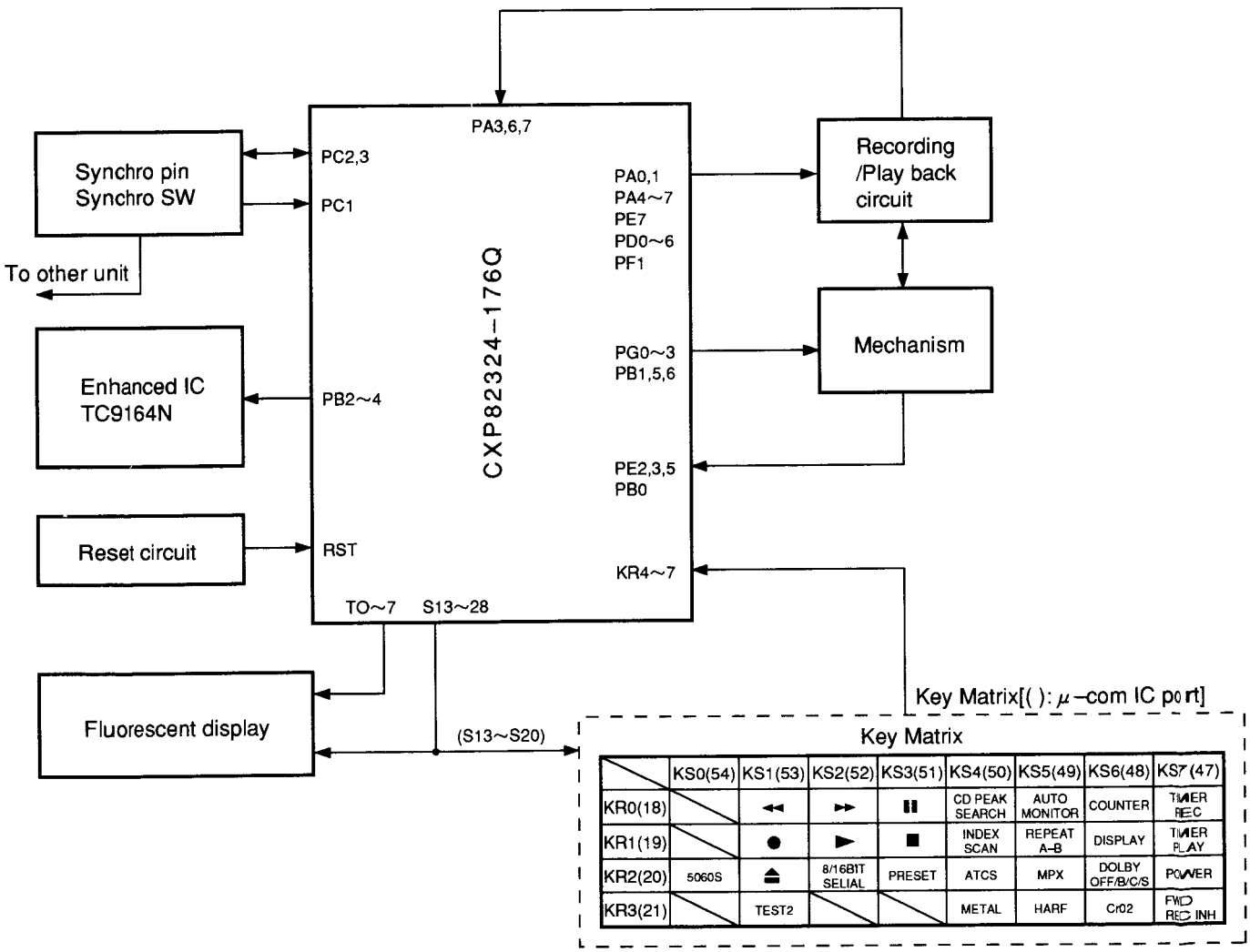
KX-5060S

BLOCK DIAGRAM



CIRCUIT DESCRIPTION

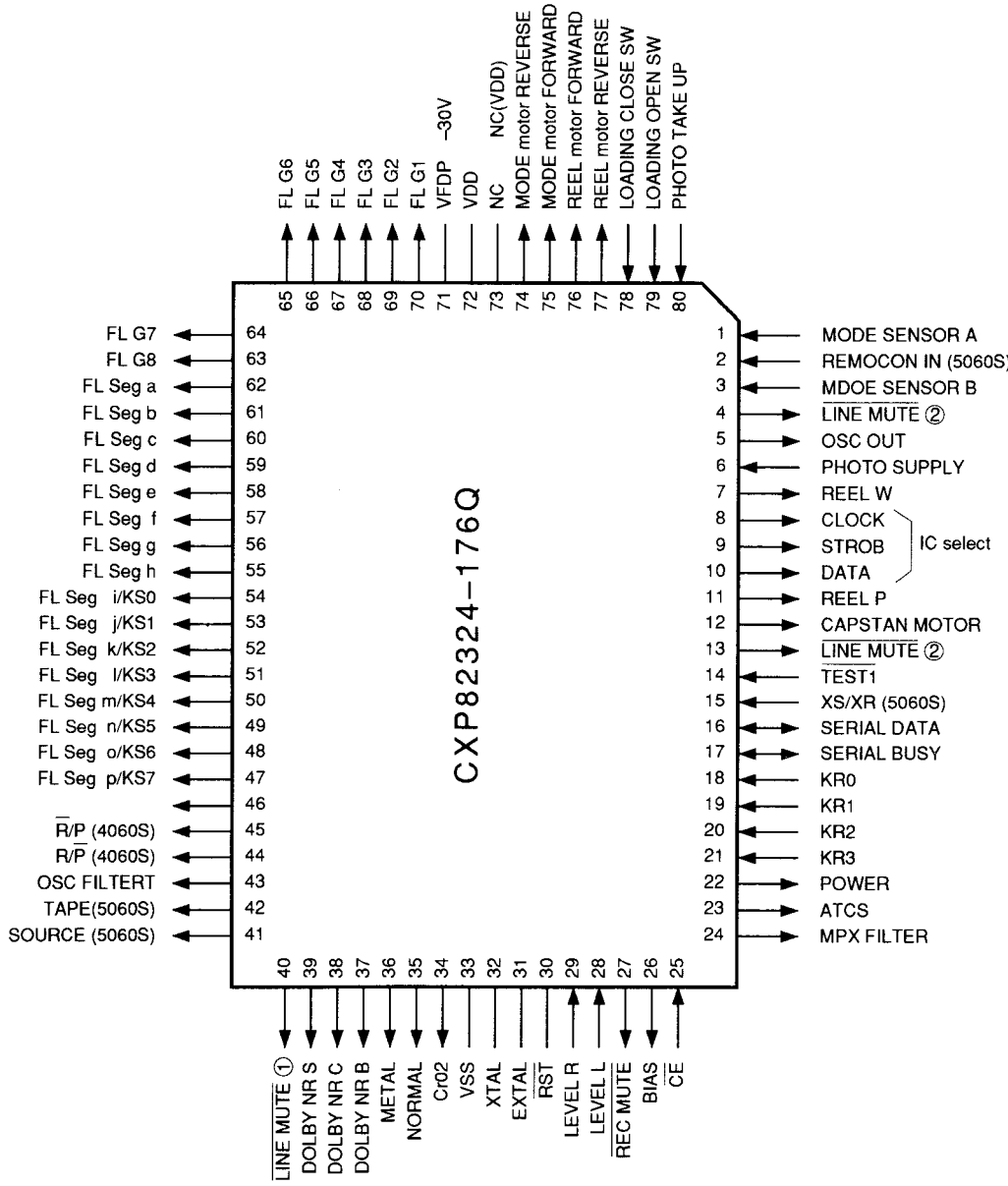
Microprocessor block diagram



CIRCUIT DESCRIPTION

Microprocessor (CXP82324-176Q):(X26-: IC705)

Pin connection



CIRCUIT DESCRIPTION

Pin Description

Pin No.	Name	I/O	Description
1	MODE SENSOR A	I	Mode photo refracter A
2	REMOCON IN	I	Remocon Input
3	MODE SENSOR B	I	Mode photo refracter B
4	$\overline{\text{LINE MUTE}}$ ②	O	Line mute control ②
5	OSC OUT	O	Output square wave using TIMER2
6	PHOTO SUPPLY	I	Supply side photo sensor input
7	REEL W	O	Reel speed selection
8	CLOCK	O	Clock for sending data to selector IC
9	STROB	O	Strobe for sending data to selector IC
10	DATA	O	Data for sending data to selector IC
11	REEL P	O	Reel speed selection
12	CAPSTAN MOTOR	O	Capstan motor ON/OFF
13	$\overline{\text{LINE MUTE}}$ ②	O	Line mute control ②
14	$\overline{\text{TEST1}}$	I	Test mode detection 1. Test mode is or when low.
15	XS/XR	I	XS/XR selection input
16	SERIAL DATA	I/O	Serial communication with other equipments (DATA)
17	SERIAL BUSY	I/O	Serial communication with other equipments (BUSY)
18	KR 0	I	Return pin of auto key scan
19	KR 1	I	Return pin of auto key scan
20	KR 2	I	Return pin of auto key scan
21	KR 3	I	Return pin of auto key scan
22	POWER	O	Power port H : POWER ON
23	ATCS	O	On when ATCS is running. Off when other status
24	MPX FILTER	O	MPX filter (High = ON)
25	$\overline{\text{CE}}$	I	Detects chip enable
26	BIAS	O	Bias oscillator control
27	$\overline{\text{REC MUTE}}$	O	Rec mute conttrol
28	LEVEL L	I	A/D level input L ch
29	LEVEL R	I	A/D level input R ch
30	$\overline{\text{RST}}$		Reset pin for microcomputer. L → H : Reset
31	EXTAL		System clock oscillator connection
32	XTAL		System clock oscillator connection
33	VSS		GND
34	CrO2	O	High only at CrO2 position
35	NORMAL	O	High only NORMAL position
36	METAL	O	High only METAL position
37	DOLBY NR B	O	ON when Dolby-B is selected
38	DOLBY NR C	O	ON when Dolby-C is selected
39	DOLBY NR S	O	ON when Dolby-S is selected
40	$\overline{\text{LINE MUTE}}$ ①	O	Line mute control ①
41	SOURCE	O	Monitor output. ON when SOURCE selected
42	TAPE	O	Monitor output. ON when TAPE selected
43	OSC FILTER	O	OSC Filter selection (400/12.5k)

CIRCUIT DESCRIPTION

Pin No.	Name	I/O	Description
44	R/$\overline{P}$	O	REC/PB selection (High = REC)
45	$\overline{R}$/P	O	REC/PB selection (High = PLAY)
46		O	Unused
47	FL Seg p/KS 7	O	SEGMENT OUTPUT FOR FDP : p Auto key scan output KS7
48	FL Seg o/KS 6	O	SEGMENT OUTPUT FOR FDP : o Auto key scan output KS6
49	FL Seg n/KS 5	O	SEGMENT OUTPUT FOR FDP : n Auto key scan output KS5
50	FL Seg m/KS 4	O	SEGMENT OUTPUT FOR FDP : m Auto key scan output KS4
51	FL Seg l/KS 3	O	SEGMENT OUTPUT FOR FDP : l Auto key scan output KS3
52	FL Seg k/KS 2	O	SEGMENT OUTPUT FOR FDP : k Auto key scan output KS2
53	FL Seg j/KS 1	O	SEGMENT OUTPUT FOR FDP : j Auto key scan output KS1
54	FL Seg i/KS 0	O	SEGMENT OUTPUT FOR FDP : i Auto key scan output KS0
55	FL Seg h	O	SEGMENT OUTPUT FOR FDP : h
56	FL Seg g	O	SEGMENT OUTPUT FOR FDP : g
57	FL Seg f	O	SEGMENT OUTPUT FOR FDP : f
58	FL Seg e	O	SEGMENT OUTPUT FOR FDP : e
59	FL Seg d	O	SEGMENT OUTPUT FOR FDP : d
60	FL Seg c	O	SEGMENT OUTPUT FOR FDP : c
61	FL Seg b	O	SEGMENT OUTPUT FOR FDP : b
62	FL Seg a	O	SEGMENT OUTPUT FOR FDP : a
63	FL G 8	O	Grid output for FDP : 8G
64	FL G 7	O	Grid output for FDP : 7G
65	FL G 6	O	Grid output for FDP : 6G
66	FL G 5	O	Grid output for FDP : 5G
67	FL G 4	O	Grid output for FDP : 4G
68	FL G 3	O	Grid output for FDP : 3G
69	FL G 2	O	Grid output for FDP : 2G
70	FL G 1	O	Grid output for FDP : 1G
71	V FDP −30V		Power supply pin for driving the FDP (−30[V])
72	VDD		μ−COM Power supply (+5[V])
73	NC (VDD)		
74	MODE motor REVERSE	O	Mode motor rotary control (Reverse)
75	MODE motor FORWARD	O	Mode motor rotary control (Forward)
76	REEL motor FORWARD	O	Reel motor rotary control (Forward)
77	REEL motor REVERSE	O	Reel motor rotary control (Reverse)
78	LOADING CLOSE SW	I	Cassete lid close sw input
79	LOADING OPEN SW	I	Cassete lid open sw input
80	PHOTO TAKE UP	I	Take-up side photo sensor input

CIRCUIT DESCRIPTION

OPERATION SPECIFICATIONS MANUAL

1. FEATURES

① 3-motor, 3-head, dual-capstan mechanism
② HX-PRO
③ ATCS/PRESET
④ Power loading
⑤ DPSS
⑥ CD peak search
⑦ Dolby B/C/S
⑧ XS8/XR (□XS8□, □XR□) (8bit/16bit)
⑨ Remote controllable

2. XS8/XR MARK(□XS8□, □XR□)SYSTEM CONTROL

When the AC power is switched on with the synchro mode switch set to XS, combining with an XS mark (□XS□) amp, receiver, etc., makes easy bidirectional operation possible. Also, combining with an XS mark (□XS□) CD makes CD peak searches possible.
When the AC power is switched on with the synchro mode switch set to XR, combining with an XR mark (□XR□) amp makes it possible to control the deck with the amp remote controller. Also, combining with an XR mark (□XR□) CD makes CD peak searches possible.

3. STATE BY DESTINATION AND MODEL

If there is diode switch at KS0 (Pin 54) and KR2 (Pin 20), the model is the KX-7060S. If not, the model is KX-5060S.

4. DEFAULT STATES

4.1 Main unit default states

ITEM	STATE
POWER	OFF
DOLBY	OFF
AUTO MONITOR	TAPE
MPX FILTER	OFF
COUNTER	0.00
DISPLAY	AILL-DISPLAY MODE
ATCS	OFF
PRESET	OFF

4.2 Selector IC default states

TC9164N			
Lch		Rch	
ITEM	STATE	ITEM	STATE
LEVEL 1 L	ON	LEVEL 1 R	ON
LEVEL 2 L	ON	LEVEL 2 R	ON
LEVEL 3 L	ON	LEVEL 3 R	ON
LEVEL 4 L	OFF	LEVEL 4 R	OFF
BIAS 1 L	ON	BIAS 1 R	ON
BIAS 2 L	ON	BIAS 2 R	ON
BIAS 3 L	ON	BIAS 3 R	ON
BIAS 4 L	OFF	BIAS 4 R	OFF

4.3 Backed up data

- POWER
- DOLBY
- Linear counter
- MPX FILTER
- RESET
- ATCS data (NORMAL, CrO2, METAL)

※ Putting the unit into test mode and pressing the Pause key or switching on the AC power while holding down the Stop key initializes the unit.

CIRCUIT DESCRIPTION

5. TEST MODE

Setting method Test Test pin ④-▶|-⑤
For main unit

Shorting either of the two pairs of terminals then switching on the power puts the unit into the corresponding test mode.

- Ending test mode: Pause the unit or terned off the AC power. The contents of test mode are not backed up.

5.1 Test 1 specifications

(1) All-lit display

- The display comes on 500 ms after the power is terneded on and for about 2 seconds the entire display lights up. At the end of the all-lit display, key input can be accepted.

(2) Mechanical terned display

The state of each of the mechanical terned is displayed of the level meter when the line meter is on.

(3) Direct change

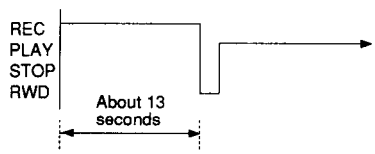
Even in play mode, the unit goes directly into record mode.

(4) Timer play

When the Timer switch is set to PLAY, the unit enters minimum-time (about 2-second) play mode.

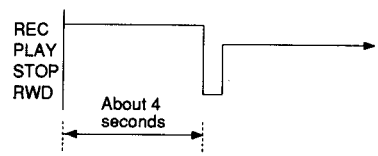
(5) Timer recording

When the Timer switch is set to REC, the unit records for 13 seconds with Dolby B, rewinds automatically, and plays back with Dolby B. The Dolby mode can be changed with the Dolby key.



(6) 4-second recording

When you press the REC key, the unit records for 4 seconds, then automatically rewinds and plays back those 4 seconds. During recording, if you press the REC key again, 4 seconds are recorded from that time. For a normal tape, the Dolby is off for the recording and play back; for a chrome tape, Dolby C is used, and for metal tape Dolby S is used.



(7) ATCS (Automatic tape calibration system)

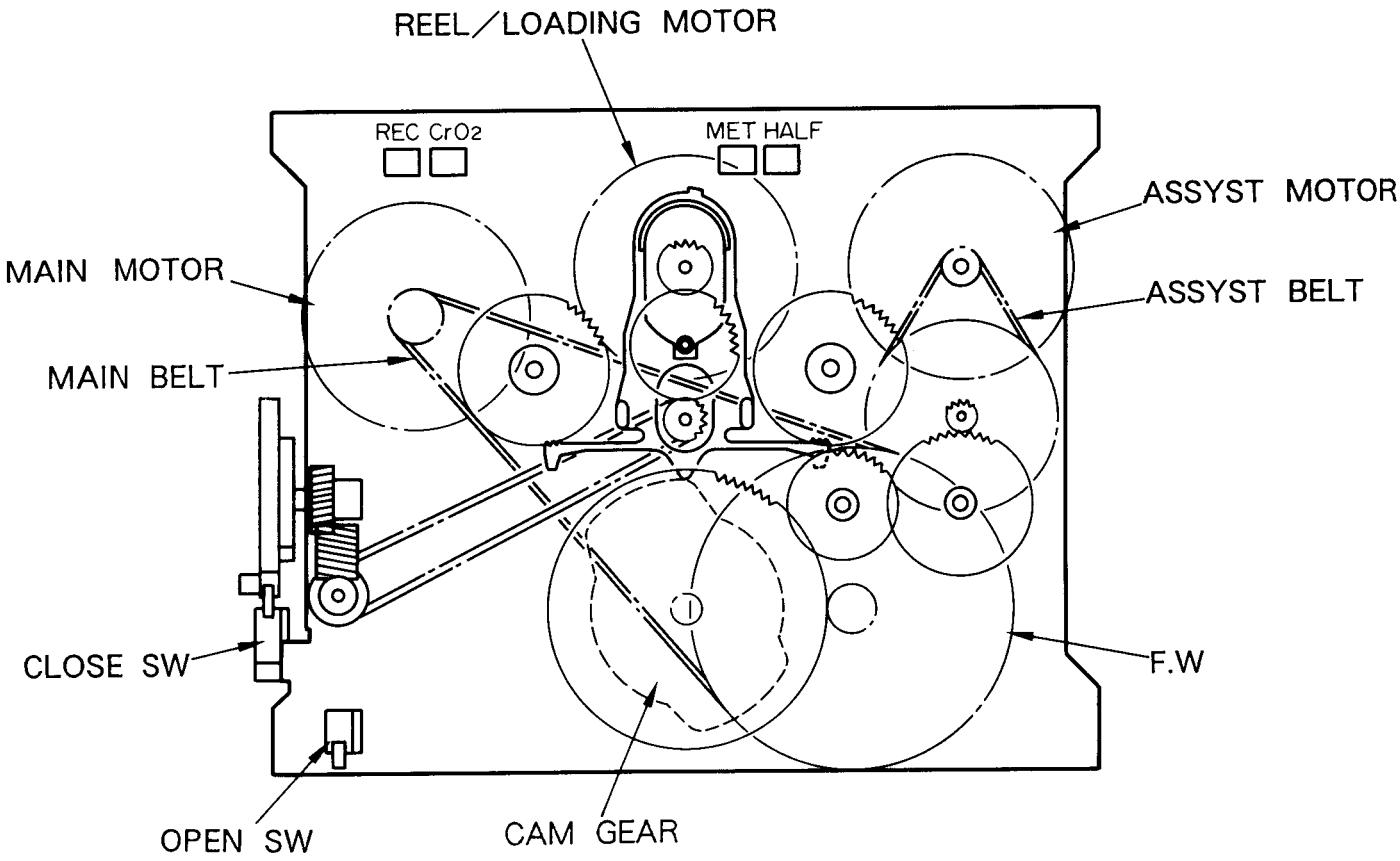
Setting time reduced (maximum about 45 seconds → about 37 seconds)

(8) Preset

The bias and level value recording and call out times have been reduced.

(9) The holder position is held at the previous position, whether or not the cord is plugged in.

MECHANISM DESCRIPTION

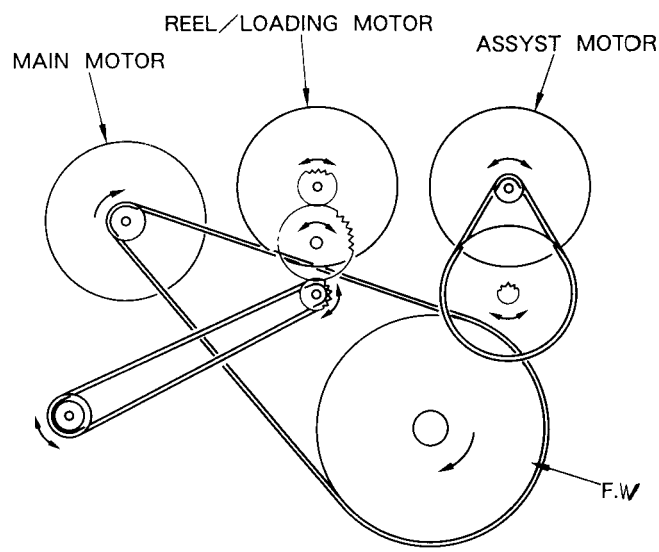


Mechanism specification

Use of parts

MM	T42-0560-08	DC MOTOR ASSY (CAPSTAN)
RM	T42-0592-08	DC MOTOR ASSY
AM	T42-0593-08	DC MOTOR ASSY
BM	D16-0299-08	MAIN BELT
BR	D16-0325-08	BELT

PLAY Torque: 35～55 g·cm
FF/RWD Torque: 70～160 g·cm
Back Tension Torque: 2～5 g·cm



MECHANISM DESCRIPTION

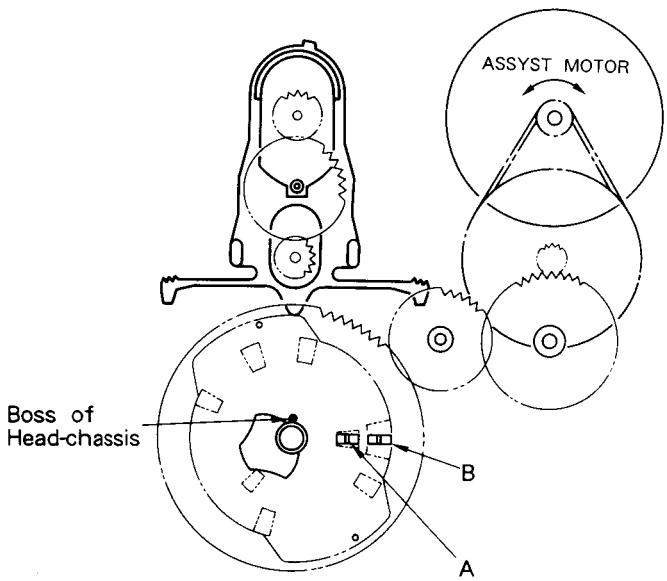
STOP/OPEN/CLS

① The assist motor rotates, and sets the mechanism to the STOP position by watching the state of the mechanism position detection SW.

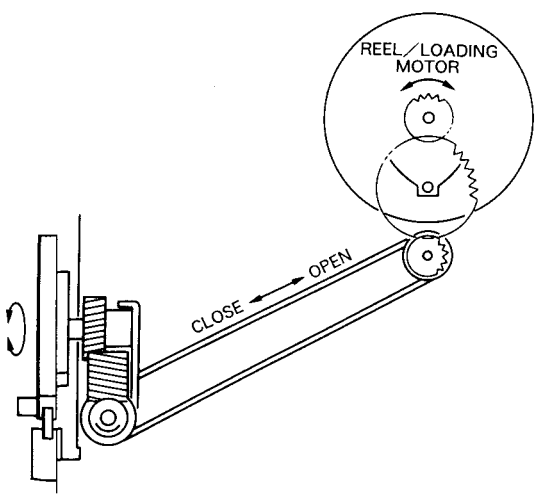
Both mechanism position detection SW A and B stop at the ON position.

The brake ASSY is pushed up, and the reel idler is fixed.

The head is pushed down, because the cam of the cam gear is at the position shown in the figure.



② The rotation of the reel motor rotates the OPEN/CLOSE pulley via reel idler.



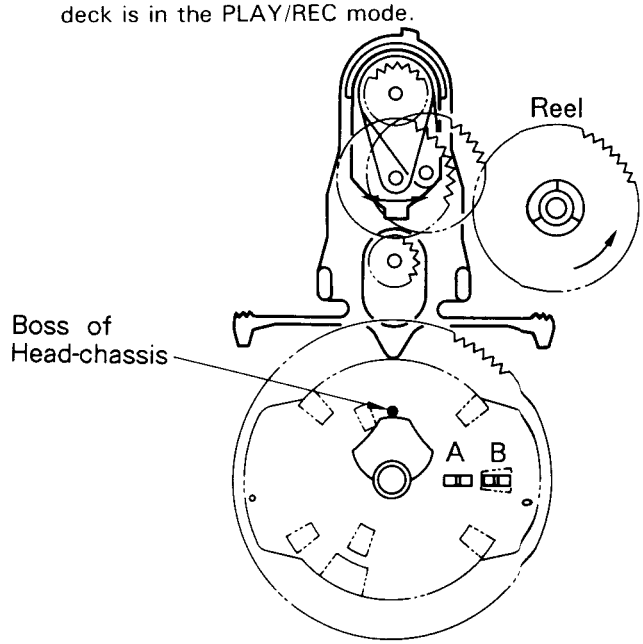
PLAY/REC

③ Rotate the assist motor, and adjust the cam gear by watching the state of the mechanism position detection SW.

A OFF H B ON L corresponds to the PLAY/REC position.

At this position the pulley is engaged with the reel, and the tape is wound by the rotation of the reel motor.

The head is raised by the cam of the cam gear, and the deck is in the PLAY/REC mode.



FF/RWD

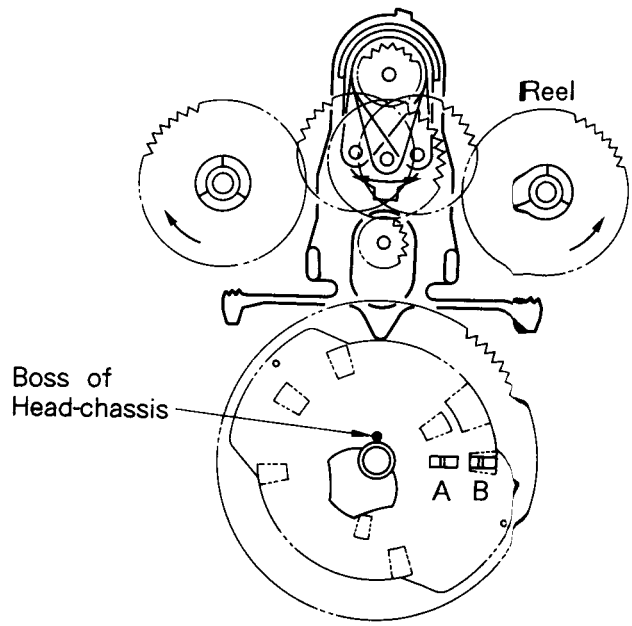
④ The cam gear is adjusted by the rotation of the assist motor.

A OFF B ON

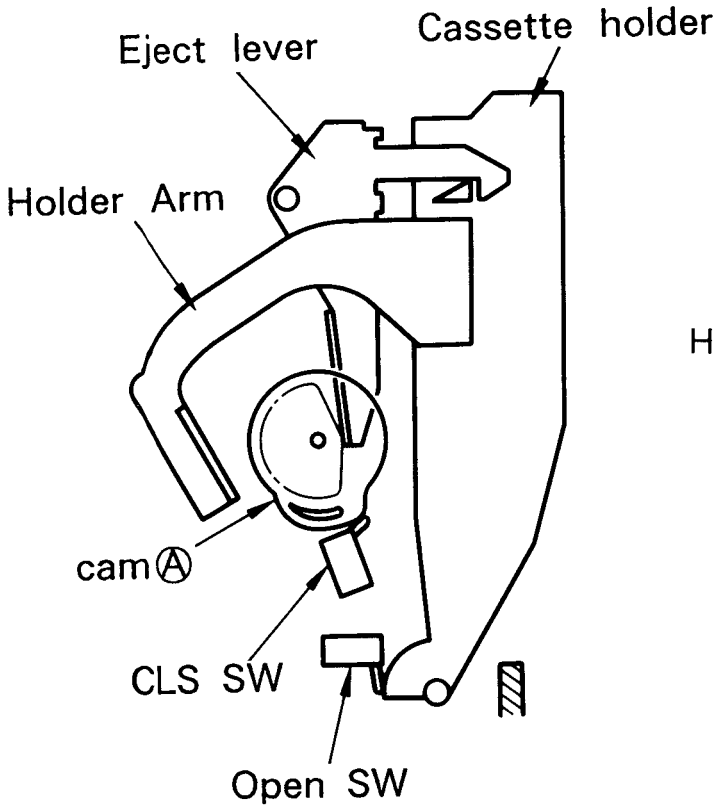
The cam bear is at the position shown in the figure, and the head is lowered.

Moreover, the brake is also lowered.

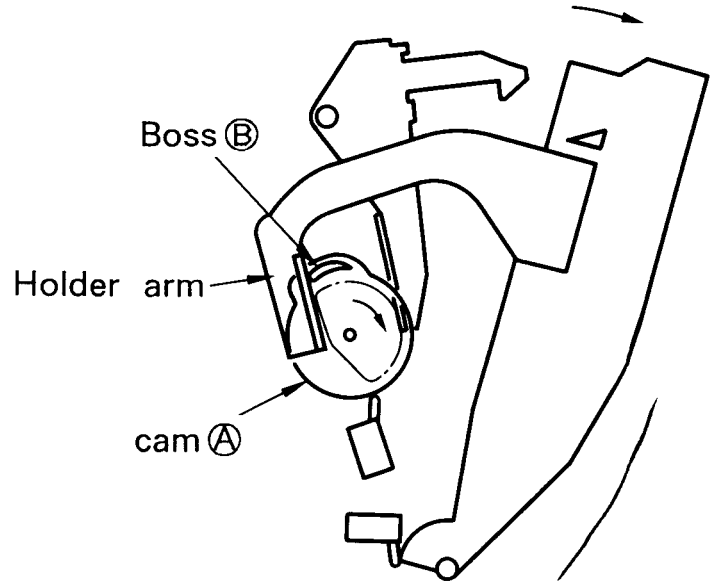
FF/RWD is controlled by the rotation of the reel motor.



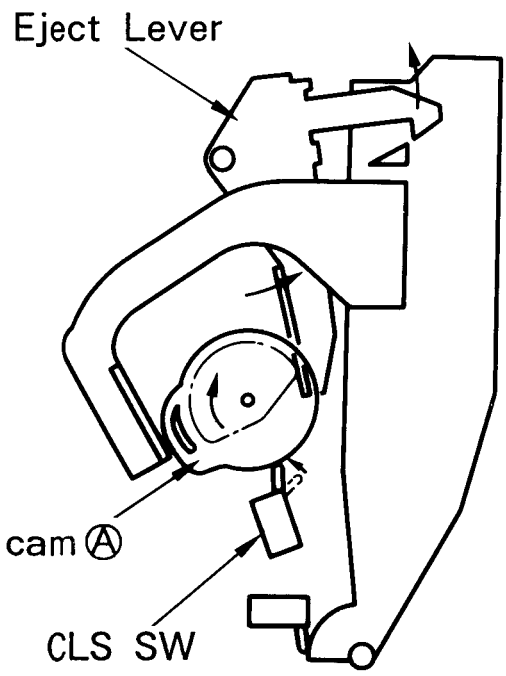
MECHANISM DESCRIPTION

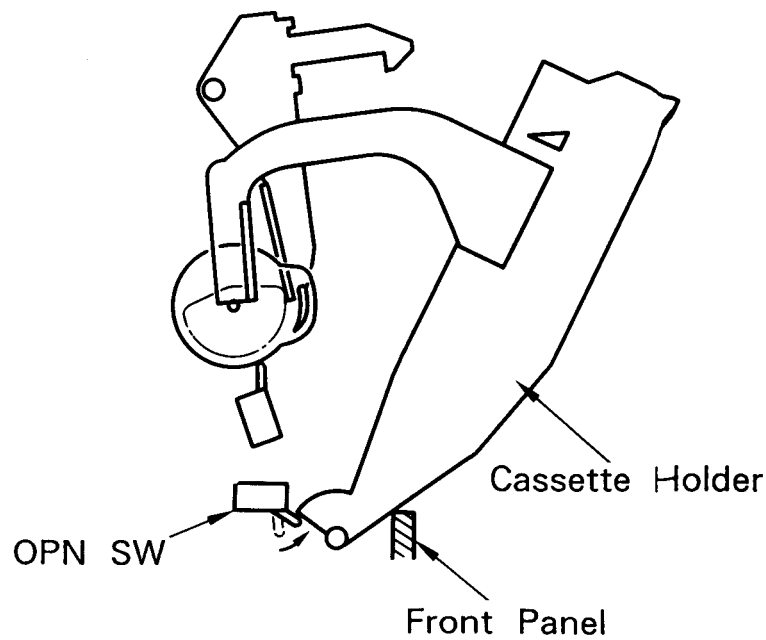


CLOSE position



4) When the cam A further rotates, the boss B begins to open while holding the tongue of the holder arm.





OPEN position

1) The cam A starts rotating
2) CLS SW turns OFF
3) The eject lever moves to the arrow direction, and the holder come off the stopper.
5) The cam stops rotating when the cassette holder comes off the OPN SW.
6) The cassette holder touches the front panel, and the holder gets at the open position.

ADJUSTMENT

RECORD/PLAYBACK UNIT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified : each switch should be set as follows: 0dBs = 0.775V TAPE : NORMAL DOLBY : OFF INPUT : LINE CASSETTEE MECHANISM SECTION(REC/PB head adjustment)							
(1)	PLAYBACK LEVEL(1)	MTT-150 400Hz(200nWb)	(B)	PLAY	VR1(L) VR2(R) (X26) (A/5)	Output level : -1.2dBs	
		MTT-256,SCC-1727 315Hz(160nWb)				Output level : -4.0dBs	
		MTT-256U,TCC-160 315Hz(250nWb)				Output level : 0 dBs	
(2)	BIAS CURRENT	(A) 1kHz,-30dBs 10kHz,-30dBs	(B)	Adjust REC VR (LEVEL,BALANCE) so that the REC monitor output becomes -20dBs at 1kHz , then record and reproduce signal of 1kHz and 10kHz in altertnation.	VR31(L) VR32(R) (X26) (A/5)	Adjust the bias current adjusting VR so that the playback level of the 10kHz signal is +0.5dB higher than that of the 1kHz signal when recrding a 1kHz signal and a 10kHz signal alternately.	
(3)	RECORD LEVEL	(A) 1kHz,-30dBs	(B)	Record and reproduce a 1kHz signal under the conditions set in (5).	VR21(L) VR22(R) (X26) (A/5)	Adjust the variable resistors so that a playback level of -20dBs is obtained.	
(4)	FL PEAK LEVEL METER	(A) 1kHz,-10dBs	-	REC PAUSE adjust REC VR(LEVEL,BALANCE) so that the monitor output is 0dBs at 1kHz.	VR95(R) (X26) (A/5)	Adjust to the same level as that to L-channel.	
Note : On item (1)							
Although 3 kinds of tapes are set forth for the playback level adjusment , the use of one tape suffices for adjustment . Here is no necessity for the use of all these 3 kinds of tapes. Other than above mentioned tapes , when a test tape equa in magnetic flux and frequency is available, the adjustment is feasible with this test tape by making the playback output suited to the specified output level of this tape in agreement with the adjustment method.							

ADJUSTMENT

MECHANISM

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION		TAPE : NORMAL	DOLBY : OFF	INPUT : LINE		0dBs = 0.775V	
1 REC/PLAY HEAD							
[1]	DEMAGNETIZATION	-	-	POWER : OFF Remove the cassette door.	REC/PLAY head	Demagnetige the REC/PLAY head with a head demagnetizer.	
[2]	CLEANING	-	-	-	REC/PLAY head erase head. capstan. pinch roller.	Clean the REC/PLAY head erase head , capstan and pinch roller, using a cotton swab slightly damped with alcohol.	
[3]	Verification of the rec/play head.	* MTT-94201	-	PLAY	-	Check that the level difference between the left and right channels is within 4 dB, If the difference exceeds 4 dB, perform the adjustments descrived in [7].	
[4]	Azimuth	MTT-114 TCC-153 SCC-1727 10kHz,-10dB	-	PLAY	Azimuth adjustment screw (C)	Adjust the output to the maximum, then set the azimuth screw so that the oscilloscope resurge wave-length approaches a 45 deg. linearity.	
[5]	Check with mirror tape	mirror tape	-	PLAY	-	Play back the mirror tape and check that the edges of the tape do not touch the tape guide. If they do , perform the adjustments descrived in [7] onward.	
[6]	TAPE SPEED	(A) MTT-111, TCC-110,SCC-1727 3kHz,-4dB		PLAY	Triming potentiometer in the DC motor	Adjust the tape speed so that a 3kHz signal is produced at the center of the tape.	
[7]	Height of the supply pinch arm	THG-801	-	PLAY	Supply pinch arm height adjustment screw (D)	Mount the standard THG-801 plate on the cassette receiving plate , then turn the block gage sideways and adjust the screws so that the gage fits in the tape guide.	
[8]	Height of REC/PLAY head	THG-801	-	PLAY	Head height adjustment screw (A)	Mount the standard THG-801 plate on the cassette receiving plate , then turn the block gage sideways and adjust the screws so that the gage fits in the tape guide.	

ADJUSTMENT

MECHANISM

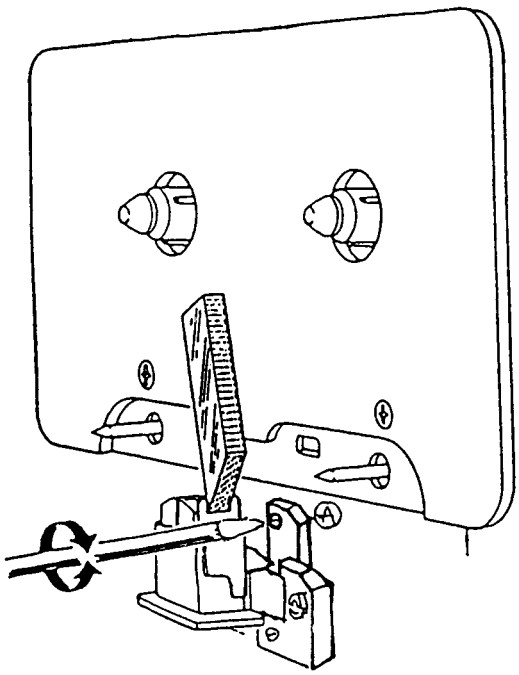
NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION		TAPE : NORMAL DOLBY : OFF INPUT : LINE				0dBs = 0.775V	
[9]	rec/play head adjustment	THG-801	-	PLAY	Head tilt adjustment screw Ⓑ	Turn the THG-801 , block gage sideway s and position it so that it is perpendicular to the head surface, Adjust screw B so that the gage and standard plate come into close contact.	
The head height can be altered by performing the adjustment in procedure [9] ,so repeat adjustment procedure, [8] and [9] several times.							
[10]	DEMAGNETIZATION	-	-	POWER : OFF Remove the cassette door.	REC/PLAY head	Demagnetize the REC/PLAY head with a head demagne-tizer.	
	CLEANING	-	-	-	REC/PLAY head erase head, capstan,pinch roller.	Clean the REC/PLAY head erase head, capstan and pinch roller using a cotton swab slightly damped withalcohol.	
[11]	Azimuth	SCC-1727 MTT-111 TCC-110 3kHz , -4dB	-	PLAY	Azimuth adjustment screw Ⓒ	Adjust the output to maximum for the 3kHz output then set the azimuth screw C so that the oscilloscope resurge waveelength aproaches a 45 deg. liearrity.	
Check the adjustments in procedures [8], [9] and [11]							
[12]	Check the mirror tape	mirror tape	-	PLAY	-	Playback the mirror tape and check that the tape elges are not touching the tape guide . If they are? , repeat procedurees [8],[9] and [1 1] to adjust .	

Return to procedure [3].

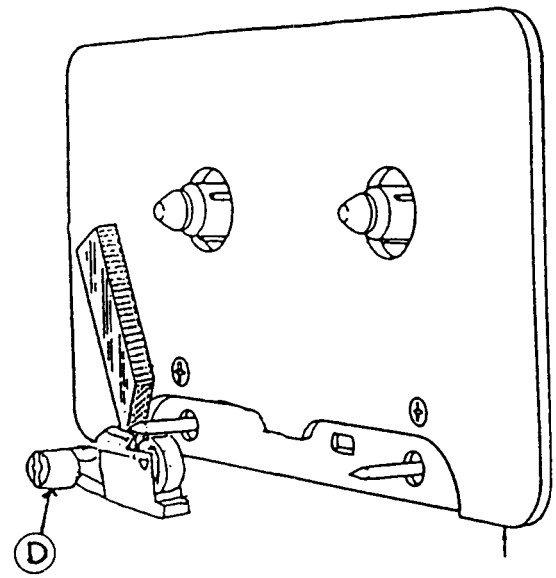
ADJUSTMENT

Adjusting REC/PLAY head

Head height adjustment



Suppry PINCH roller height Adjustment.



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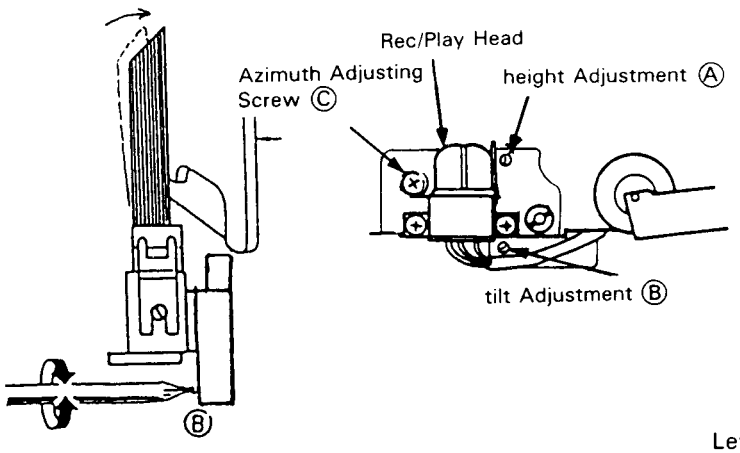
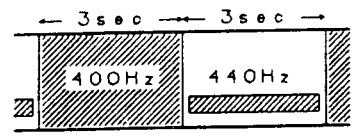
Head tilt adjustment



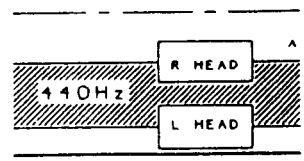
* MTT-94201 (TEST TAPE for HEAD height adjustment)



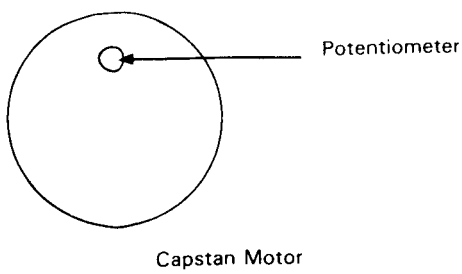
400 Hz Full track

440 Hz 0.8 mm width track

Level difference is about the same of L, R ch output when the adjustment is complate.

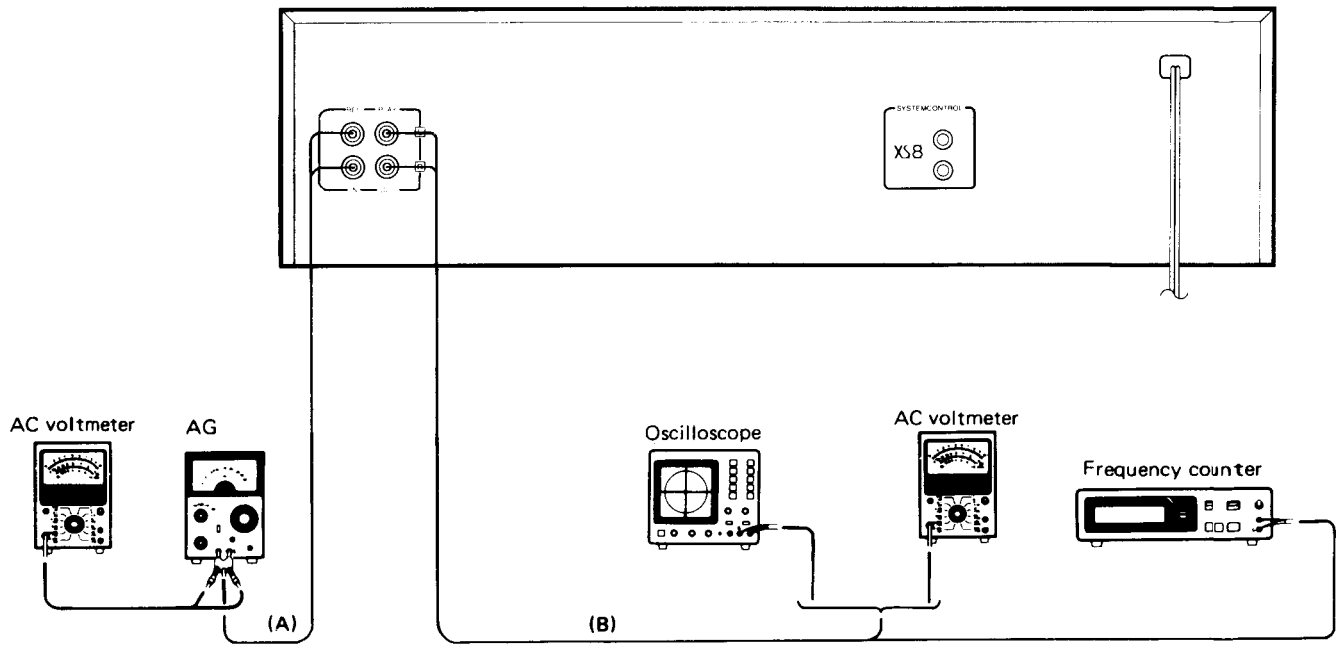


Tape Speed Adjustment



ADJUSTMENT

Measurement Equipment Connections:



AJUSTES

Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL DECK DE CASETES	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
A menos que se especifique otra cosa, ajuste los controles respectivos de la forma siguiente : 0 dBs = 0,775 V TAPE : NORMAL DOLBY : OFF INPUT : LINE SECCIÓN DEL MECANISMO DEL CASETE (Ajuste de la cabeza GRABADORA/REPRODUCTORA)							
(1)	NIVEL DE REPRODUCCIÓN	MTT-150 400Hz (200nWb)	(B)	REPRODUCCIÓN	VR1 (L) VR2 (R) (X26) (A/5)	Nivel de salida : −1,2 dBs	
		MTT-256, SCC-1727 315Hz (160nWb)				Nivel de salida : −4,0 dBs	
		MTT-256,TCC-160 315Hz (250nWb)				Nivel de salida : 0 dBs	
(2)	CORRIENTE DE POLARIZACIÓN	(A) 1kHz, −30dBs 12.5kHz, −30dBs	(B)	Ajuste REC VR LEVEL, VR21, 22 de forma que la salida del monitor de grabación sea de−20 dBs a 1 kHz, y después grabe y reproduzca alternativamente señales de 1 kHz y 12.5 kHz.	VR31 (L) VR32 (R) (X26) (A/5)	Ajuste la corriente de polarización regulando el resistor variable de forma que el nivel de reproducción de la señal de 10 kHz sea +0,5 dB superior que el de la señal de 1 kHz cuando grabe alternativamente señales de 1 kHz y de 10 kHz.	
(3)	NIVEL DE GRABACIÓN	(A) 1kHz, −30dBs	(B)	Grabe y reproduzca una señal de 1 kHz en las condiciones establecidas en (2).	VR21 (L) VR22 (R) (X26) (A/5)	Ajuste los resistores variables hasta obtener un nivel de reproducción de−20 dBs.	
(4)	MEDIDOR DE NIVEL DE PICO FLUORESCENTE	(A) 1kHz, −10dBs	—	GRABACIÓN EN PAUSA Ajuste REC VR (LEVEL, BALANCE) de forma que la salida del monitor sea de 0 dBs a 1 kHz.	VR95 (R) (X26) (A/5)	Ajuste al mismo nivel que el del canal izquierdo.	
Nota : En el ítem (1)							
Aunque existen 3 tipos de cintas para el ajuste del nivel de reproducción, la utilización de una de ellas será suficiente para el ajuste. Aquí no es necesario utilizar los 3 tipos de cintas. Aunque no sean las cintas mencionadas, si se dispone de una cinta de prueba de flujo magnético y frecuencia iguales, el ajuste será posible con tal cinta haciendo que la salida de reproducción se adecúe al nivel de salida especificado de esta cinta de acuerdo con el método de ajuste.							

AJUSTES

Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL DECK DE CASETES	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
SECCIÓN DEL DECK DE CASETES TAPE : NORMAL DOLBY : OFF INPUT : LINE 0 dBs = 0,775 V 1 CABEZA GRABADORA/REPRODUCTORA							
[1]	DESMAGNETIZACIÓN	—	—	POWER : OFF Extraiga la puerta del casete.	Cabeza grabadora/ reproductora	Desmagnetice la cabeza grabadora/ reproductora con un desmagnetizador de cabezas.	
[2]	LIMPIEZA	—	—	—	Cabeza grabadora/ reproductora, cabeza borradora, eje de arrastre, rodillo compresor	Limpie la cabeza grabadora/ reproductora, cabeza borradora, eje de arrastre, y rodillo compresor utilizando un palillo de algodón ligeramente humedecido en alcohol.	
[3]	Verificación de la cabeza grabadora/ reproductora	MTT-94201	—	REPRODUCCIÓN	—	Compruebe si la diferencia de nivel entre los canales izquierdo y derecho es inferior a 4 dB. Si es superior a 4dB, realice los ajustes descritos en [7].	
[4]	Acimut	MTT-144 TCC-153 SCC-1727 10kHz, —10dB	—	REPRODUCCIÓN	Tornillo de ajuste del acimut (C)	Ajuste la salida al máximo, y después regule el tornillo de acimut de forma que la longitud de la onda del osciloscopio se acerquea una linealidad de 45 grados.	
[5]	Comprobación con un casete de espejo	Casete de espejo	—	REPRODUCCIÓN	—	Ponga en reproducción la cinta del casete de espejo y compruebe si los bordes de la cinta tocan la guía de la cinta. Si la tocan, realice los ajustes descritos en [7].	
[6]	VELOCIDAD DE LA CINTA	(A) MTT-111 TCC-110 SCC-1727 3kHz, —4dB	—	REPRODUCCIÓN	Potenciómetro de ajuste del motor de CC	Ajuste la velocidad de la cinta de forma que la señal de 3 kHzse produzca en el centro de la cinta.	
[7]	Altura del brazo compresor de suministro	THG-801	—	REPRODUCCIÓN	Tornillo de ajuste de la altura del brazo compresor de suministro (D)	Monte la placa estándar THG—801 en la placa receptora del casete, y después gire lateralmente el calibrador del bloque y ajuste los tornillos de forma que el calibrador encaje en la guía de la cinta.	
[8]	Altura de la cabeza grabadora/ reproductora	THG-801	—	REPRODUCCIÓN	Tornillo de ajuste de la altura de la cabeza	Monte la placa estándar THG—801 en la placa receptora del casete, y después gire lateralmente el calibrador del bloque y ajuste los tornillos de forma que el calibrador encaje en la guía de la cinta.	

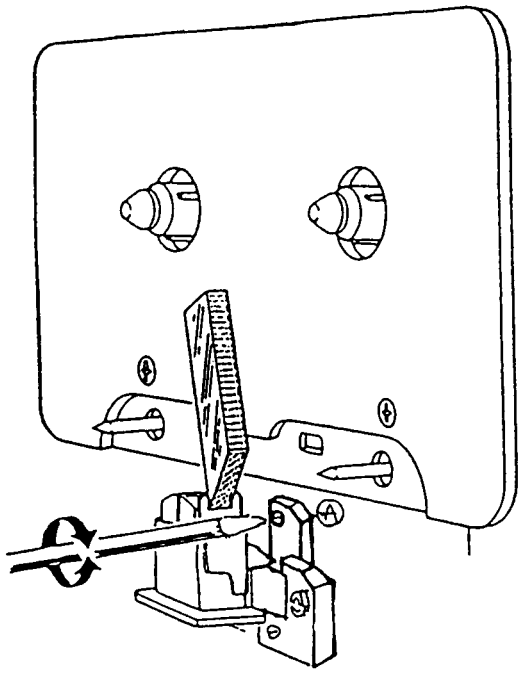
AJUSTES

Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL DECK DE CASETES	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
SECCIÓN DEL DECK DE CASETES TAPE : NORMAL DOLBY : OFF INPUT : LINE						0 dBs = 0,775 V	
[9]	Ajuste de la cabeza grabadora/ reproductora	THG-801	—	REPRODUCCIÓN	Tornillo de ajuste de inclinación de la cabeza (B)	Gire lateralmente el calibrador del bloque THG—801 y colóquelo de forma que quede perpendicular a la superficie de la cabeza. Ajuste el tornillo B de forma que el calibrador y la placa estándar entren en contacto.	
La altura de la cabeza podrá alterarse realizando el ajuste del procedimiento [9], por lo tanto, repita varias veces el procedimiento de ajuste [8] y [9].							
[10]	DESMAGN ETIZACIÓN	—	—	POWER : OFF Extraiga la puerta del casete.	Cabeza grabadora/ reproducto ra	Desmagnetice la cabeza grabadora/reproductora con un desmagnetizador de cabezas.	
	LIMPIEZA	—	—	—	Cabeza grabadora/ reproducto ra, cabeza borradora, eje de arrastre, rodillo compresor	Limpie la cabeza grabadora/ reproductora, cabeza borradora, eje de arrastre, y rodillo compresor utilizando un palillo de algodón ligeramente humedecido en alcohol.	
[11]	Acimut	SCC-1727 MTT-111 TCC-110 3kHz, —4dB	—	REPRODUCCIÓN	Tornillo de ajuste del acimut (C)	Ajuste la salida al máximo para la salida de 3 kHz y después ajuste el tornillo de acimut (C) de forma que la longitud de la onda del osciloscopio se acerque a una linealidad de 45 grados.	
Comprobación de los ajustes de los procedimientos [8], [9], y [11]							
[12]	Comprobaci ón del casete de espejo	Casete de espejo	—	REPRODUCCIÓN	—	Ponga en reproducción la cinta del casete de espejo y compruebe si los bordes de la cinta tocan la guía de la cinta. Para ajustar, repita los procedimientos [8], [9], y [11].	

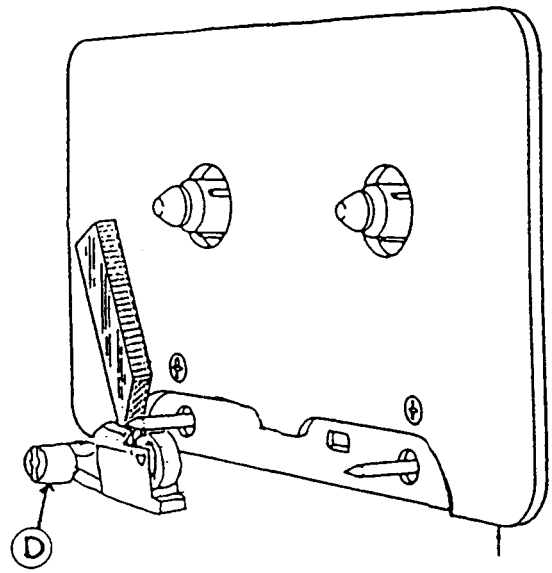
ADJUSTMENT

Adjusting REC/PLAY head

Head height adjustment



Suppry PINCH roller height Adjustment.



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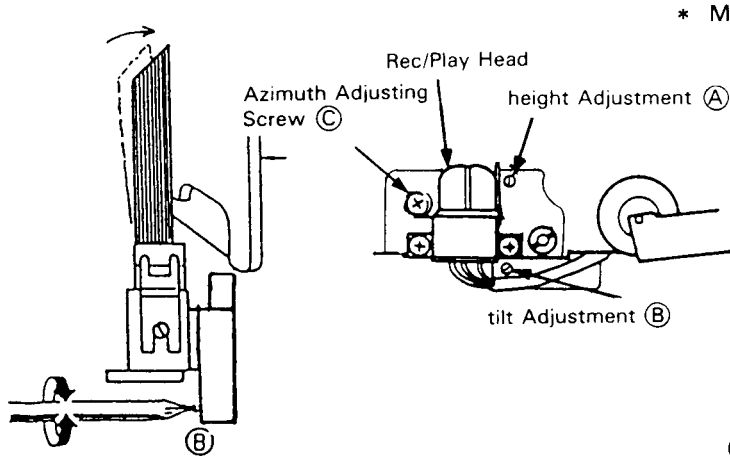
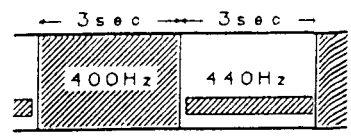
Head tilt adjustment

* MTT-94201 (TEST TAPE for HEAD height adjustment)

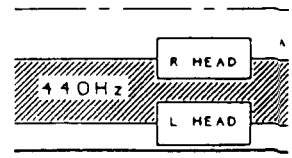




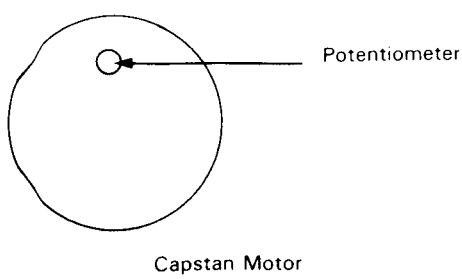
400 Hz Full track

440 Hz 0.8 mm width track

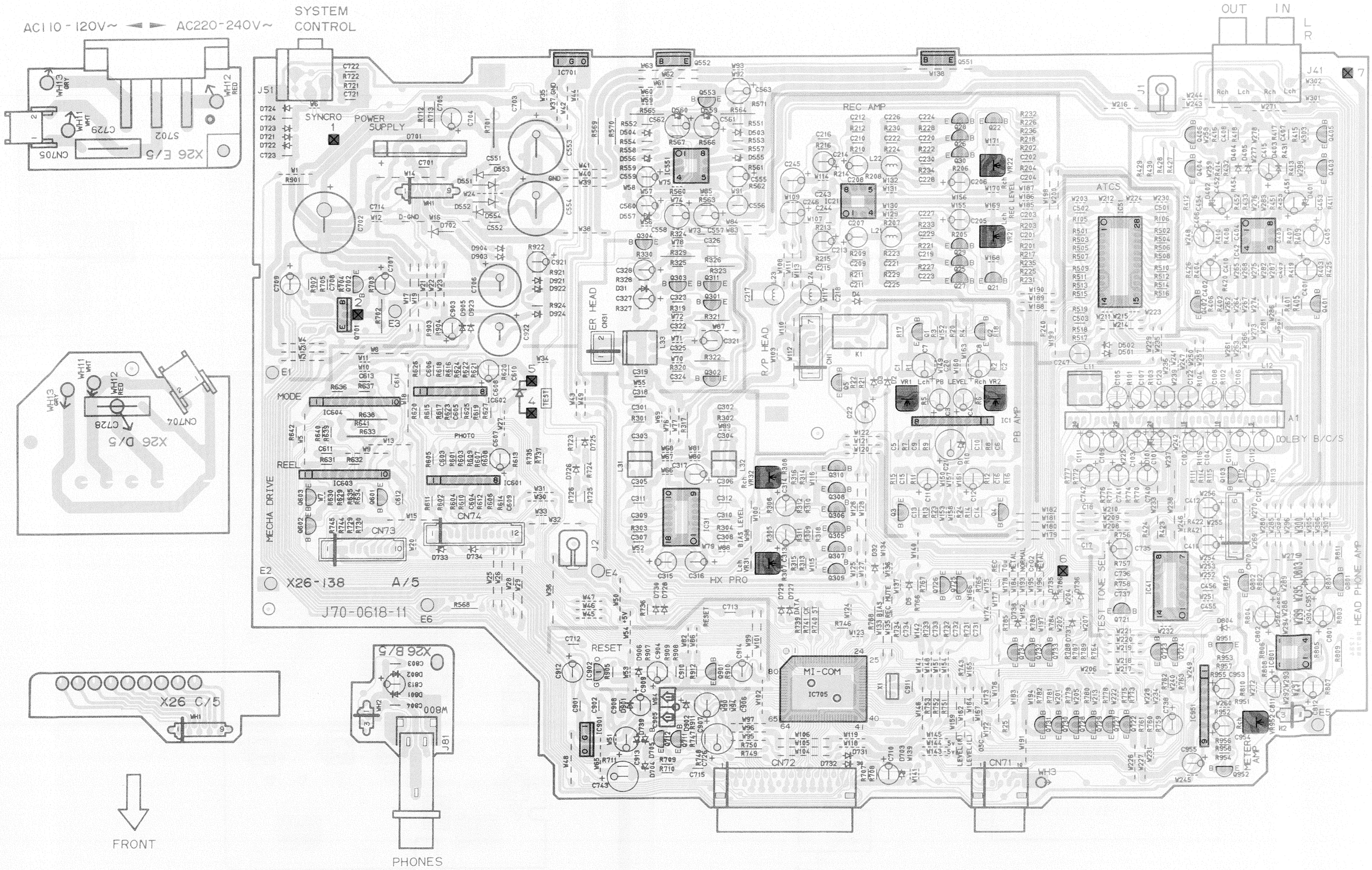
Cuando finalice el ajuste, la diferencia de nivel de la salida de los canales izquierdo y derecho serán aproximadamente iguales.



Tape Speed Adjustment

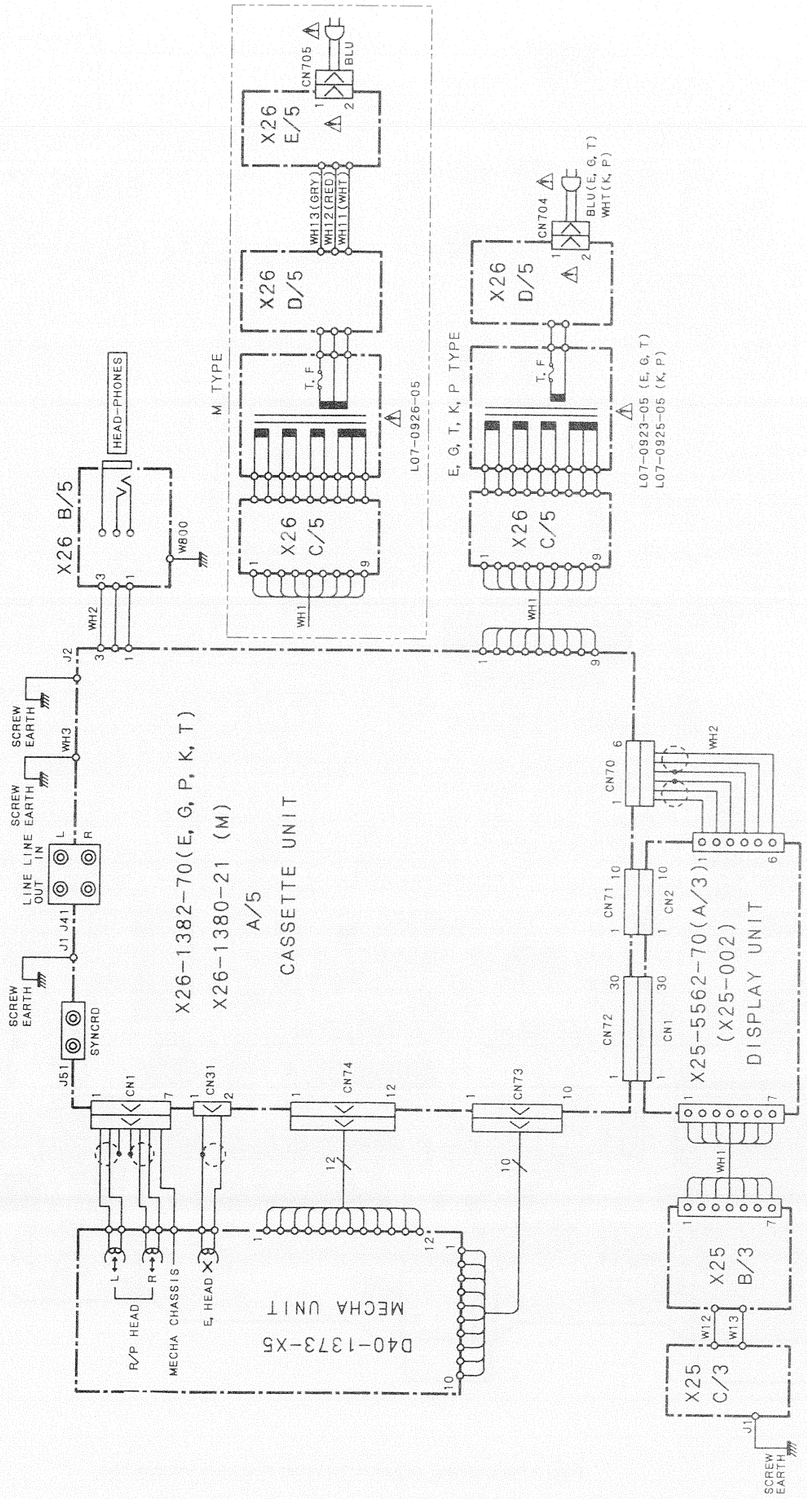


PC BOARD (Component side view) CASSETTE UNIT (X26-138X-XX)

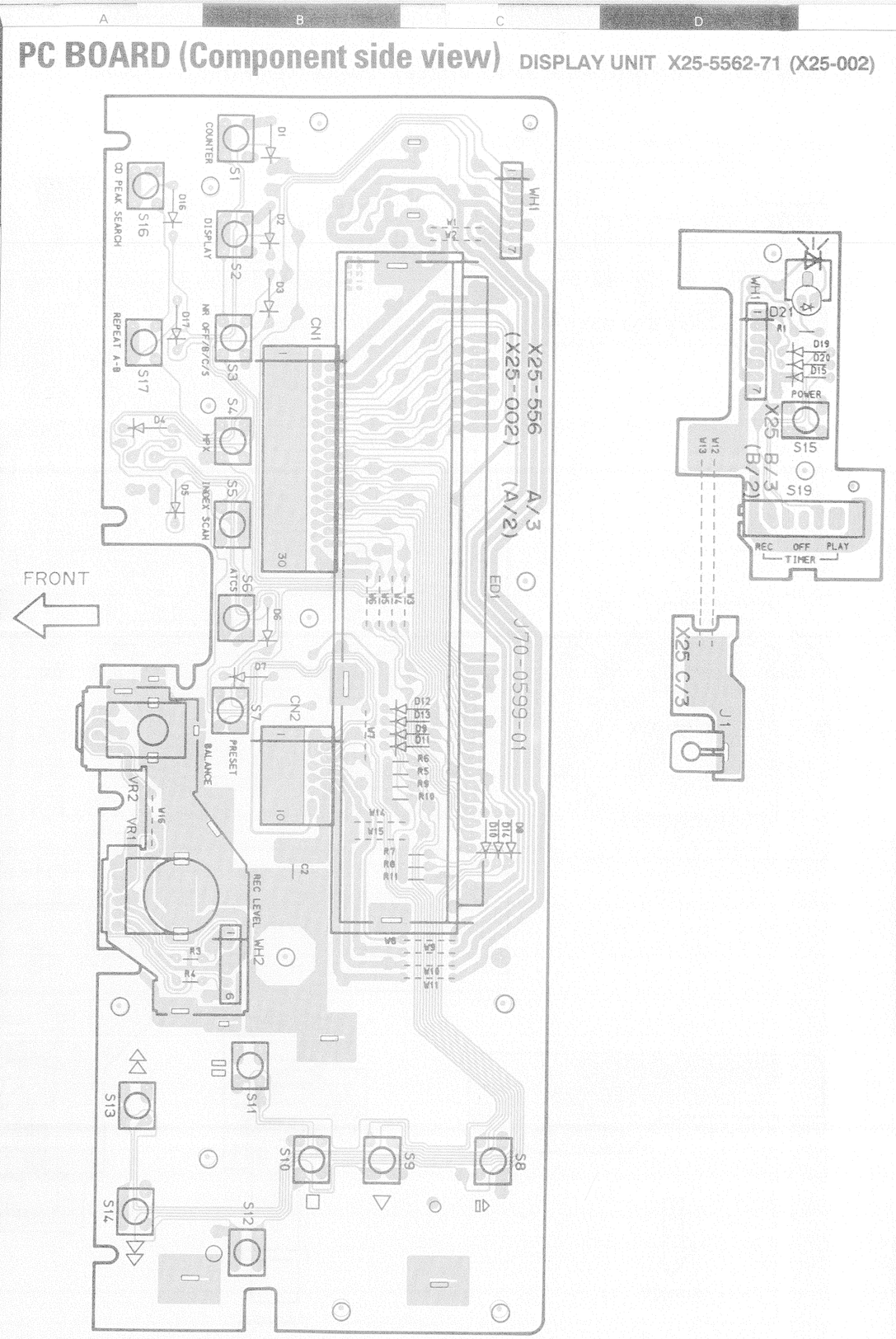


Refer to the schematic diagram for the values of resistors and capacitors.

WIRING DIAGRAM

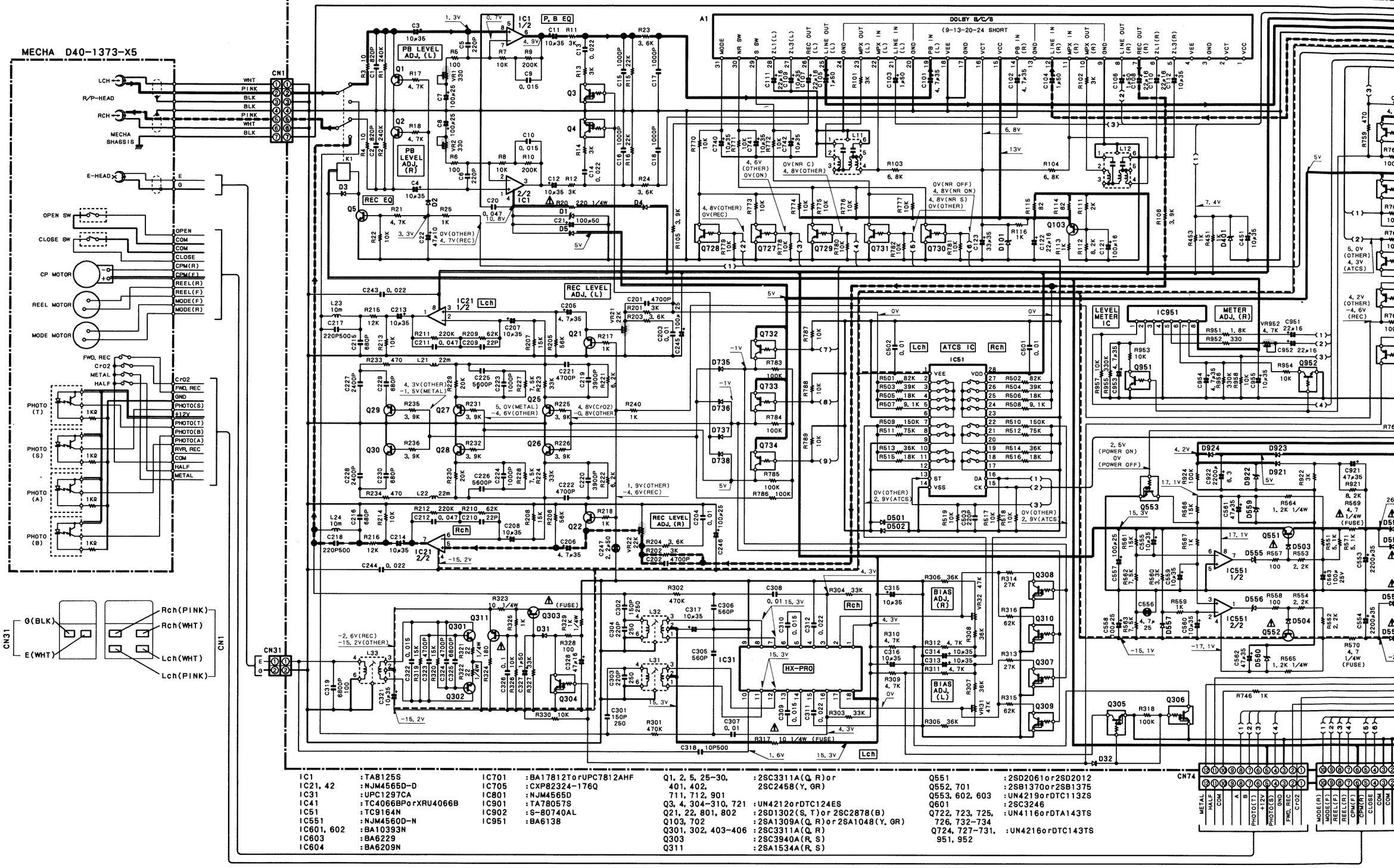


PC BOARD (Component side view) DISPLAY UNIT X25-5562-71 (X25-002)



Refer to the schematic diagram for the values of resistors and capacitors.

X26-1382-70 (E, G, K, P, T) X26-1380-21 (M) (A/5) CASSETTE UNIT



IC1	:TA8125S	IC701	:BA17812TorUPC7812AHF	Q1, 2, 5, 25–30, 401, 402, 711, 712, 901	:2SC3311A(Q, R)or 2SC2458(Y, GR)	Q551	:2SD2061or2SD2012
IC21, 42	:NJM4565D-D	IC705	:CXP82324-176Q			Q552, 701	:2SB1370or2SB1375
IC31	:UPC1297CA	IC801	:NJM4565D			Q553, 602, 603	:UN4219orDTC113ZS
IC41	:TC4066BPorXRU4066B	IC901	:TA78057S	Q3, 4, 304–310, 721	:UN4212orDTC124ES	Q601	:2SC3246
IC51	:TC9164N	IC902	:S-80740AL	Q21, 22, 801, 802	:2SD1302(S, T)or 2SC2878(B)	Q722, 723, 725, 726, 732–734	:UN4116orDTA143TS
IC551	:NJM4560D-N	IC951	:BA6138	Q103, 702	:2SA1309A(Q, R)or2SA1048(Y, GR)	Q724, 727–731, 951, 952	:UN4216orDTC143TS
IC601, 602	:BA10393N			Q301, 302, 403–406	:2SC3311A(Q, R)		
IC603	:BA6229			Q303	:2SC3940A(R, S)		
IC604	:BA6209N			Q311	:2SA1534A(R, S)		

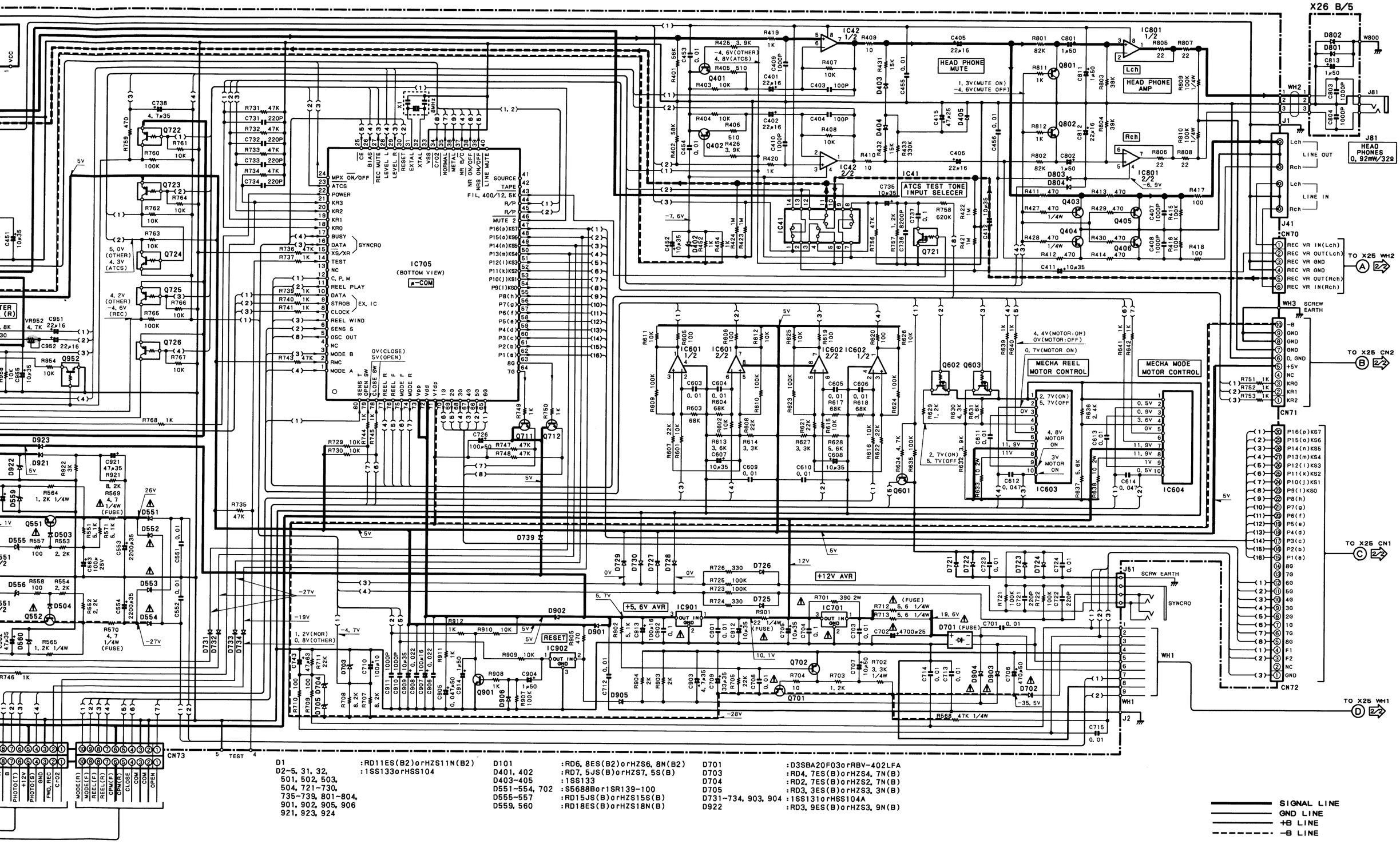
DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une casette étant insérée en mode du lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vomagnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Dolby noise reduction and manufactured under license Licensing Corporation. HX Pro "DOLBY", the double-D symb marks of Dolby Laboratories Li



D1 :RD11ES(B2)orHZS11N(B2)
D2-5, 31, 32, 501, 502, 503, 504, 721-730, 735-739, 801-804, 901, 902, 905, 906, 921, 923, 924 :1SS133orHSS104

D101 :RD6.8ES(B2)orHZS6.8N(B2)
D401, 402 :RD7.5JS(B)orHZS7.5S(B)
D403-405 :1SS133
D551-554, 702 :S5688Bor1SR139-100
D555-557 :RD15JS(B)orHZS15S(B)
D559, 560 :RD18ES(B)orHZS18N(B)

D701 :D3SBA20F03orRBV-402LFA
D703 :RD4.7ES(B)orHZS4.7N(B)
D704 :RD2.7ES(B)orHZS2.7N(B)
D705 :RD3.3ES(B)orHZS3.3N(B)
D731-734, 903, 904 :1SS131orHSS104A
D922 :RD3.9ES(B)orHZS3.9N(B)

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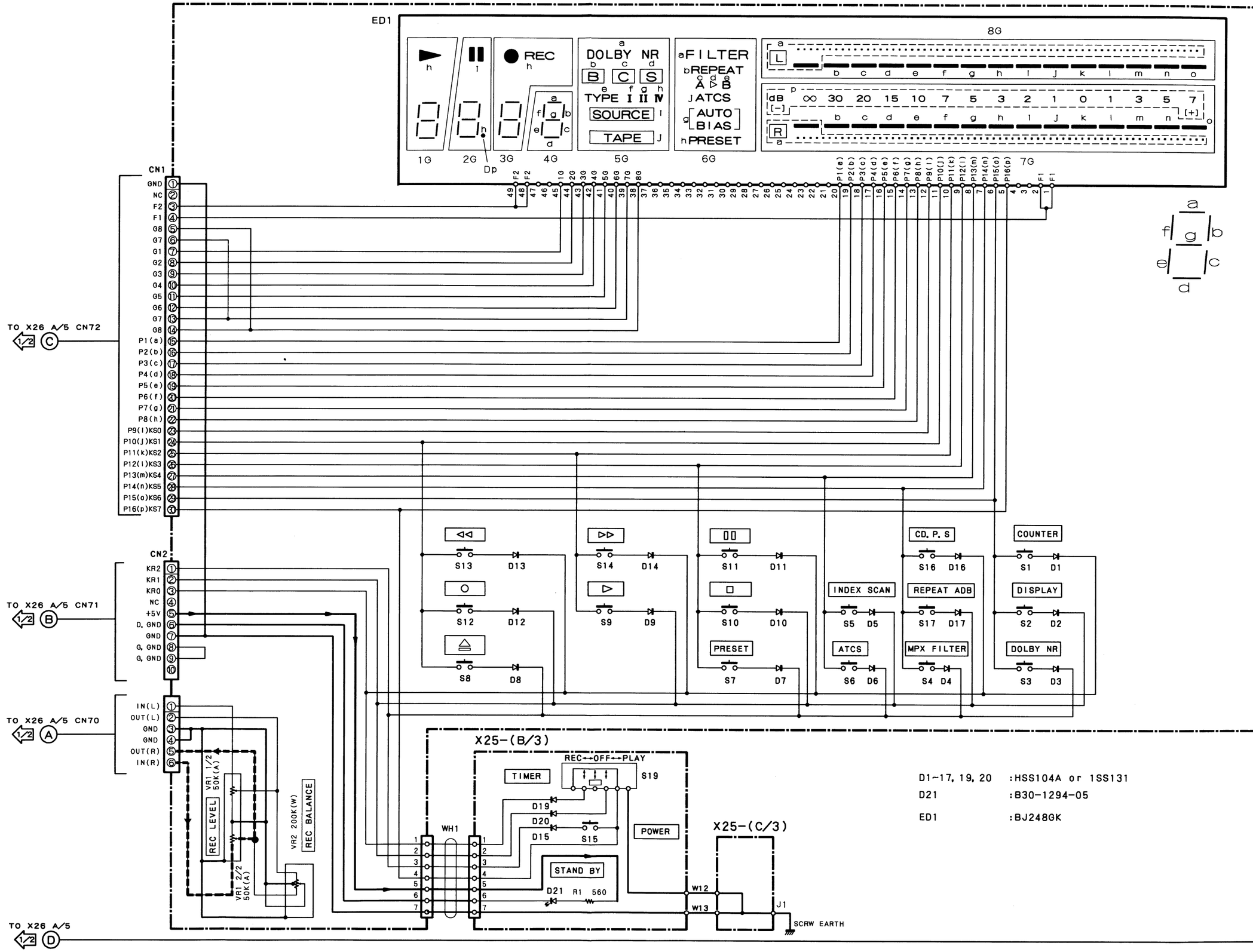
Y26-3940-11

KX-5060S

KENWOOD

X25-5562-71(A/3) (X25-002)



D1~17, 19, 20 :HSS104A or 1SS131

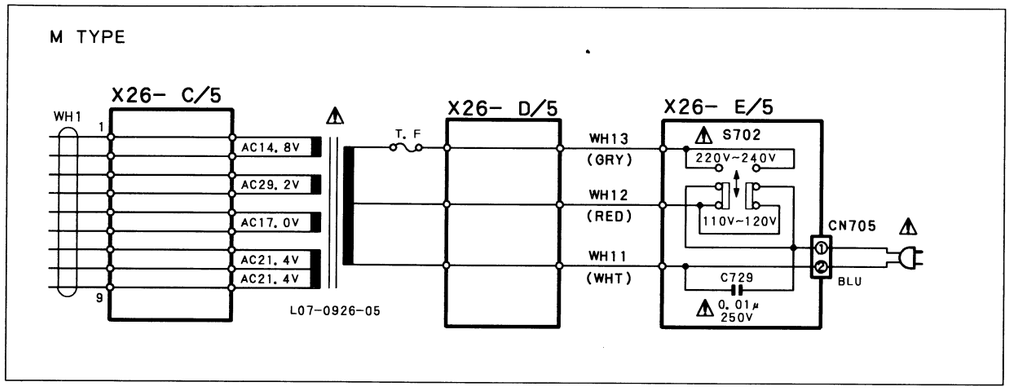
D21 :B30-1294-05

ED1 :BJ248GK

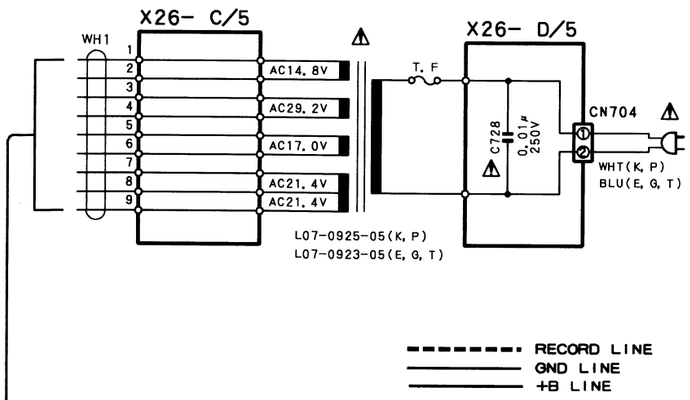
M TYPE

K. P. E.

M TYPE

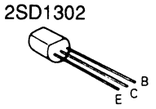


K. P. E. G. T TYPE

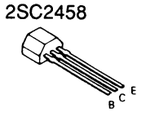


RECORD LINE
GND LINE
+B LINE

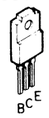
2SA1534A
2SC2878
2SC3246
2SC3940A
2SD1302



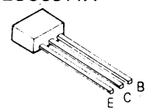
DTA143TS
DTC124ES
DTC143TS
UN4116
2SA1048
2SC2458



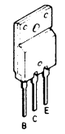
2SB1370
2SD2061



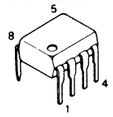
UN4212
UN4216
UN4219
2SA1309A
2SC3311A



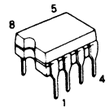
2SB1375
2SD2012



NJM4560D-N



NJM4565D
NJM4565D-D



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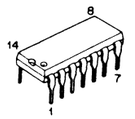
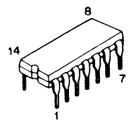
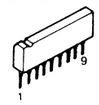


TC4066BP



BA6138



BA17812T
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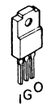
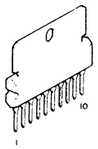
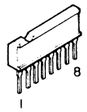


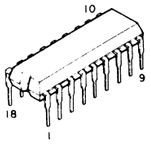
BA6229



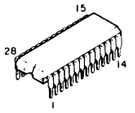
BA10393N



UPC1297CA



TC9164N



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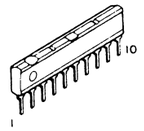
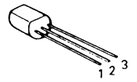
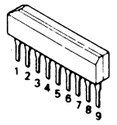


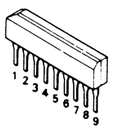
S-80740AL



KAM02



TA8125S



DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une casette ètant insérée en mode du lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vomagnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

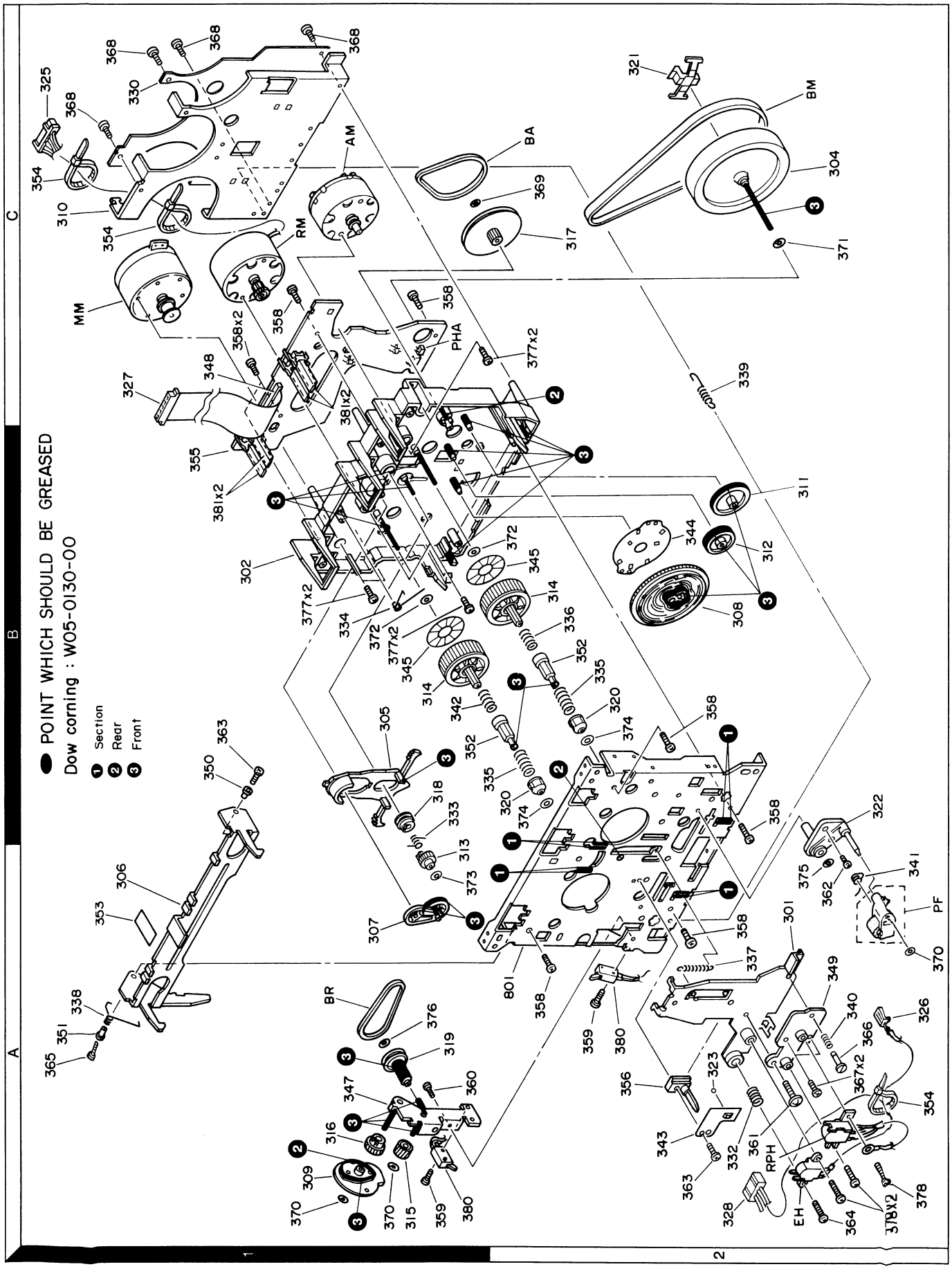
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Y26-3940-11

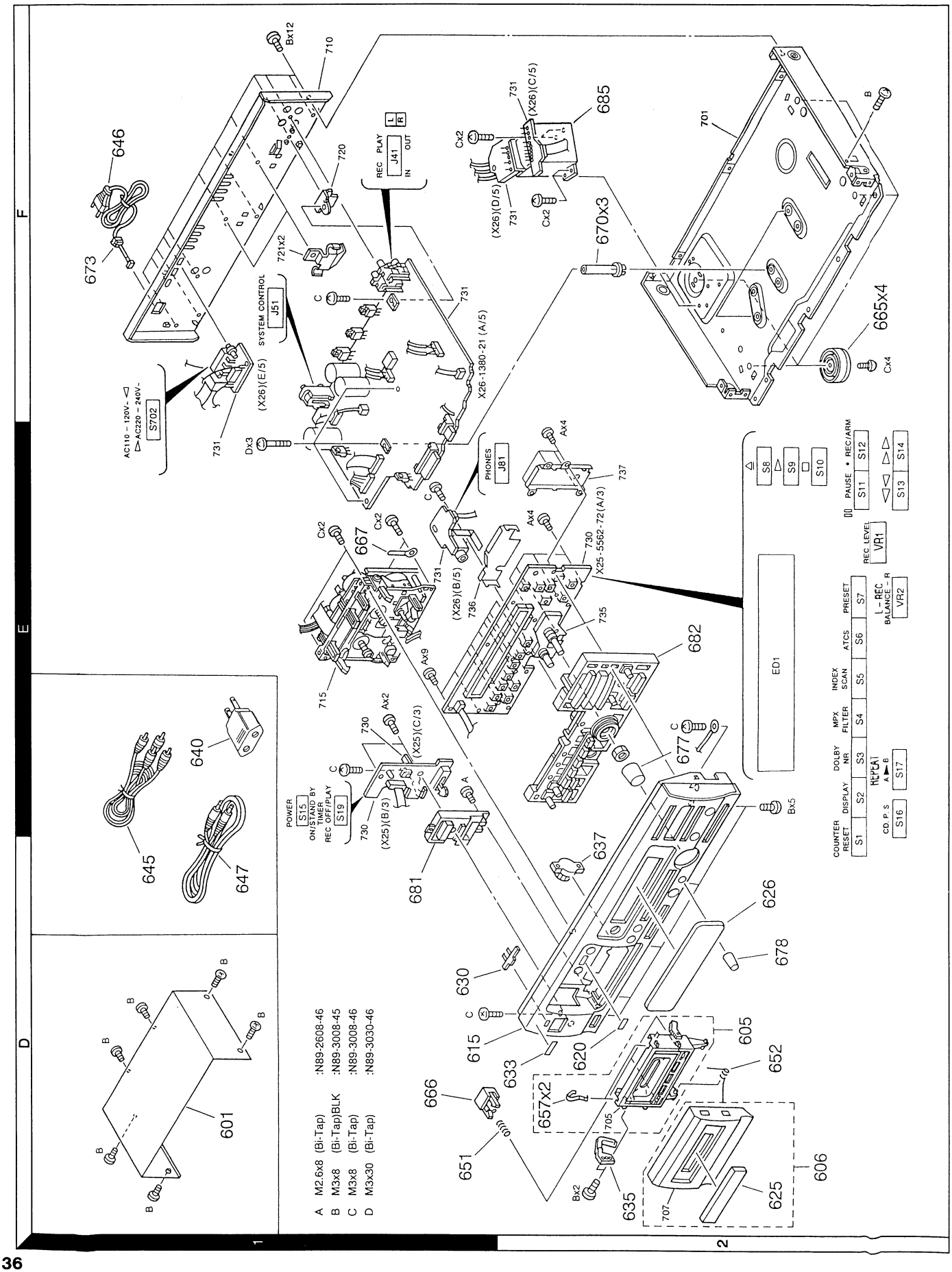
KX-5060S

KENWOOD

EXPLODED VIEW (MECHANISM UNIT)



EXPLODED VIEW (UNIT)



× New Parts
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No. 1

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
KX-5060S						
601	1D	*	A01-3136-01	METALLIC CABINET		
605	2D		A53-1368-23	CASSETTE HOLDER ASSY		
606	2D	*	A53-1823-13	CASSETTE LID ASSY		
615	1D	*	A60-0629-01	PANEL		
620	2D		B03-1691-04	DRESSING SEAL		
625	2D		B10-2018-04	FRONT GLASS (LID)		
626	2D		B10-2053-04	FRONT GLASS (FRONT)		
630	1D	*	B12-0239-04	INDICATOR		
633	2D		B43-0287-04	KENWOOD BADGE		
-		*	B46-0092-43	WARRANTY CARD	K	
-			B46-0121-33	WARRANTY CARD	P	
-			B46-0310-03	WARRANTY CARD	EGT	
-			B58-0945-03	CAUTION CARD	T	
-		*	B58-0964-13	CAUTION CARD	KP	
-		*	B58-0965-13	CAUTION CARD	PT	
-		*	B58-0966-13	CAUTION CARD	EM	
-		*	B58-0970-13	CAUTION CARD	G	
-			B60-1589-00	INSTRUCTION MANUAL (DUT,ITA)	E	
-			B60-1590-00	INSTRUCTION MANUAL (GERMAN)	EG	
-		*	B60-1721-00	INSTRUCTION MANUAL (ENGLISH)	EKPMT	
-		*	B60-1722-00	INSTRUCTION MANUAL (FRENCH)	EP	
-		*	B60-1723-00	INSTRUCTION MANUAL (SPANISH)	EM	
-		*	B60-1724-00	INSTRUCTION MANUAL (CHINESE)	M	
-		*	B60-1725-00	INSTRUCTION MANUAL (TAIWANESE)	M	
635	2D		D10-3435-04	ARM		
637	2D		D39-0200-05	DAMPER		
⚠ 640	1E		E03-0115-05	AC PLUG ADAPTER	M	
645	1D		E30-0505-05	AUDIO CORD		
⚠ 646	1F		E30-2592-15	AC POWER CORD	EGM	
⚠ 646	1F		E30-2650-05	AC POWER CORD	KP	
⚠ 646	1F		E30-2721-05	AC POWER CORD	T	
647	1D		E30-2733-05	CORD WITH PLUG		
651	1D		G01-3503-04	COMPRESSION SPRING		
652	2D		G01-3504-14	TORSION COIL SPRING		
657	2D		G02-1008-04	FLAT SPRING		
-			H10-5489-02	POLYSTYRENE FOAMED FIXTURE	EGKPM	
-			H10-5490-02	POLYSTYRENE FOAMED FIXTURE	EGKPM	
-			H10-5491-02	POLYSTYRENE FOAMED FIXTURE	T	
-			H10-5492-02	POLYSTYRENE FOAMED FIXTURE	T	
-		*	H12-2229-04	PACKING FIXTURE		
-			H20-0586-04	PROTECTION COVER	M	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	EGKPM	
-			H25-0382-04	PROTECTION BAG	EGKPT	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-		*	H50-1188-04	ITEM CARTON CASE	EGKPM	
-		*	H50-1189-04	ITEM CARTON CASE	T	
665	2F		J02-1034-05	FOOT		
666	1D		J11-0140-04	CLAMPER ASSY		
667	1E		J19-0306-05	LEAD HOLDER		
670	2F		J19-3703-04	UNIT HOLDER		
⚠ 673	1F		J42-0083-05	POWER CORD BUSHING		

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× New Parts
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No. 2

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
677	2E		K29-4384-04	KNOB (REC LEVEL)		
678	2D		K29-4440-04	KNOB (REC BALANCE)		
681	1D	*	K29-5946-03	KNOB (POWER)		
682	2E	*	K29-5990-02	KNOB (FUNCTION)		
⚠ 685	2F		L07-0923-05	POWER TRANSFORMER	EGT	
⚠ 685	2F	*	L07-0925-05	POWER TRANSFORMER	KP	
685	2F	*	L07-0926-05	POWER TRANSFORMER	M	
DISPLAY UNIT X25-5562-71 (X25-002)						
D21			B30-1294-05	LED		
C2			CK45FF1H103Z	CERAMIC 0.010UF Z		
VR1			R31-0009-05	VARIABLE RESISTOR		
VR2			R31-0008-05	VARIABLE RESISTOR		
S1 -17			S40-1064-05	PUSH SWITCH		
S19			S31-1036-05	SLIDE SWITCH		
D1 -17			HSS104A	DIODE		
D1 -17			1SS131	DIODE		
D19 ,20			HSS104A	DIODE		
D19 ,20			1SS131	DIODE		
ED1		*	BJ248GK	INDICATOR TUBE		
CASSETTE UNIT (X26-1382-70:E, G, K, R, T 0-21:M)						
C1 ,2			CF92FV1H821J	MF 820PF J		
C3 ,4			CE04KW1V100M	ELECTRO 10UF 35WV		
C5 ,6			CC45FSL1H221J	CERAMIC 220PF J		
C7 ,8			CE04KW1E101M	ELECTRO 100UF 25WV		
C9 ,10			CF92FV1H153J	MF 0.015UF J		
C11 ,12			CE04KW1V100M	ELECTRO 10UF 35WV		
C13 ,14			CF92FV1H223J	MF 0.022UF J		
C15 -18			CK45FB1H102K	CERAMIC 1000PF K		
C20			CF92FV1H473J	MF 0.047UF J		
C21			CE04KW1H101M	ELECTRO 100UF 50WV		
C22			CE04KW1A470M	ELECTRO 47UF 10WV		
C101,102			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C103-106			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C107,108			CE04KW1C220M	ELECTRO 22UF 16WV		
C109			CE04KW1V100M	ELECTRO 10UF 35WV		
C110,111			CE04KW1C220M	ELECTRO 22UF 16WV		
C112			CE04KW1V100M	ELECTRO 10UF 35WV		
C121			CE04KW1C101M	ELECTRO 100UF 16WV		
C122			CE04KW1C220M	ELECTRO 22UF 16WV		
C123			CE04KW1V330M	ELECTRO 33UF 35WV		
C201,202			CF92FV1H472J	MF 4700PF J		
C203,204			CF92FV1H103J	MF 0.010UF J		
C205,206			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C207,208			CE04KW1V100M	ELECTRO 10UF 35WV		
C209,210			CC45FSL1H220J	CERAMIC 22PF J		
C211,212			CF92FV1H473J	MF 0.047UF J		
C213,214			CE04KW1V100M	ELECTRO 10UF 35WV		
C215,216			CK45FB1H681K	CERAMIC 680PF K		
C217,218			CC45FSL2H221J	CERAMIC 220PF J		
C219,220			CF92FV1H392J	MF 3900PF J		
C221,222			CF92FV1H472J	MF 4700PF J		
C223,224			CF92FV1H102J	MF 1000PF J		

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No. 3

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C225,226			CF92FV1H562J	MF	5600PF	J		
C227,228			CF92FV1H242J	MF	2400PF	J		
C229,230			CK45FB1H681K	CERAMIC	680PF	K		
C243,244			CF92FV1H223J	MF	0.022UF	J		
C245,246			CE04KW1E101M	ELECTRO	100UF	25WV		
C247			CE04HW1H2R2M	NP-ELEC	2.2UF	50WV		
C301,302			C91-1434-05	FILM	150PF	J		
C303,304			C91-1436-05	FILM	220PF	J		
C305,306			CK45FB1H561K	CERAMIC	560PF	K		
C307,308			CF92FV1H103J	MF	0.010UF	J		
C309,310			CF92FV1H153J	MF	0.015UF	J		
C311,312			CF92FV1H223J	MF	0.022UF	J		
C313-317			CE04KW1V100M	ELECTRO	10UF	35WV		
C318			CC45FSL2H100D	CERAMIC	10PF	D		
C319			CQ93HP2A682J	MYLAR	6800PF	J		
C321			CE04KW1V100M	ELECTRO	10UF	35WV		
C322			CF92FV1H153J	MF	0.015UF	J		
C323,324			CF92FV1H472J	MF	4700PF	J		
C325			CF92FV1H682J	MF	6800PF	J		
C326			CF92FV1H104J	MF	0.10UF	J		
C327			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C328			CE04KW1C470M	ELECTRO	47UF	16WV		
C401,402			CE04KW1C220M	ELECTRO	22UF	16WV		
C403,404			CC45FSL1H101J	CERAMIC	100PF	J		
C405,406			CE04KW1C220M	ELECTRO	22UF	16WV		
C407-410			CK45FB1H102K	CERAMIC	1000PF	K		
C411,412			CE04KW1V100M	ELECTRO	10UF	35WV		
C415			CE04KW1E470M	ELECTRO	47UF	25WV		
C451,452			CE04KW1V100M	ELECTRO	10UF	35WV		
C453,454			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C455,456			CF92FV1H103J	MF	0.010UF	J		
C501,502			CF92FV1H103J	MF	0.010UF	J		
C503			CC45FSL1H221J	CERAMIC	220PF	J		
C551,552			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C553,554			CE04KW1V222M	ELECTRO	2200UF	35WV		
C555			CE04KW1V100M	ELECTRO	10UF	35WV		
C556			CE04HW1E4R7M	NP-ELEC	4.7UF	25WV		
C557,558			CE04KW1E101M	ELECTRO	100UF	25WV		
C559,560			CE04KW1V100M	ELECTRO	10UF	35WV		
C561,562			CE04KW1V470M	ELECTRO	47UF	35WV		
C563			CE04KW1E101M	ELECTRO	100UF	25WV		
C603-606			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C607,608			CE04KW1V100M	ELECTRO	10UF	35WV		
C609-611			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C612			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C613			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C614			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C701			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C702			CE04KW1E472M	ELECTRO	4700UF	25WV		
C703			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C704			CF92FV1H104J	MF	0.10UF	J		
C705			CE04KW1V100M	ELECTRO	10UF	35WV		
C706			CE04KW1H471M	ELECTRO	470UF	50WV		
C707			CE04KW1H100M	ELECTRO	10UF	50WV		
C708			CK45FF1H103Z	CERAMIC	0.010UF	Z		

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No. 4

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C709			CE04KW1V330M	ELECTRO	33UF	35WV		
C710			CE04KW1A101M	ELECTRO	100UF	10WV		
C712-714			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C715			CF92FV1H103J	MF	0.010UF	J		
C721,722			CC45FSL1H221J	CERAMIC	220PF	J		
C723,724			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C726			CE04KW1H101M	ELECTRO	100UF	50WV		
⚠ C728			C91-1439-05	FILM	0.01UF	250VAC	EGKPT	
⚠ C729			C91-1439-05	FILM	0.01UF	250VAC	M	
C731-734			CC45FSL1H221J	CERAMIC	220PF	J		
C735			CE04KW1V100M	ELECTRO	10UF	35WV		
C736			CF92FV1H822J	MF	8200PF	J		
C737			CF92FV1H104J	MF	0.10UF	J		
C738			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C740-742			CE04KW1V100M	ELECTRO	10UF	35WV		
C743			CE04KW1J470M	ELECTRO	47UF	63WV		
C801,802			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C803,804			CK45FB1H102K	CERAMIC	1000PF	K		
C811			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C812			CE04KW1C220M	ELECTRO	22UF	16WV		
C813			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C901			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C902			CF92FV1H104J	MF	0.10UF	J		
C903			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C904			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C905			C90-1826-05	BACKUP	0.047F	5.5WV		
C906			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C907			CE04KW1C101M	ELECTRO	100UF	16WV		
C908			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C909			CE04KW1V100M	ELECTRO	10UF	35WV		
C910			CF92FV1H102J	MF	1000PF	J		
C911			CK45FB1H102K	CERAMIC	1000PF	K		
C912			CE04KW1V100M	ELECTRO	10UF	35WV		
C913			CE04KW1C101M	ELECTRO	100UF	16WV		
C914			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C921			CE04KW1V470M	ELECTRO	47UF	35WV		
C922			CE04KW0J222M	ELECTRO	2200UF	6.3WV		
C951,952			CE04KW1C220M	ELECTRO	22UF	16WV		
C953,954			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C955			CE04KW1V100M	ELECTRO	10UF	35WV		
J41			E13-0445-05	PHONO JACK (4P)				
J51			E11-0188-05	MINIATURE PHONE JACK(2P)				
J81			E11-0190-05	PHONE JACK				
W800			E29-1611-04	LEAD PLATE				
L11 ,12			L79-0720-05	LC FILTER				
L21 ,22			L40-2235-29	SMALL FIXED INDUCTOR(22MH ,J)				
L23 ,24			L40-1035-29	SMALL FIXED INDUCTOR(10MH, J)				
L31 ,32			L32-0547-05	BIAS OSCILATING COIL				
L33			L32-0533-05	BIAS OSCILATING COIL				
X1			L78-0290-05	RESONATOR (8MHZ)				
R20			RD14NB2E221J	RD	220	J 1/4W		
R317			R92-0219-05	FUSE RESIST	10	G 1/4W		
R321,322			RD14NB2E220J	RD	22	J 1/4W		
R323			R92-0219-05	FUSE RESIST	10	G 1/4W		

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No. 5

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
R329			RD14NB2E102J	RD 1.0K J 1/4W		
R431,432			RN14BK2C1502F	RN 15.0K F 1/6W		
R564,565			RD14NB2E122J	RD 1.2K J 1/4W		
R569,570			R92-0341-05	CARBON FILM RESISTOR		
R633			RS14KB3D100J	FL-PROOF RS 10 J 2W		
R638			RS14KB3D100J	FL-PROOF RS 10 J 2W		
R701			RS14KB3D391J	FL-PROOF RS 390 J 2W		
R702			RD14NB2E332J	RD 3.3K J 1/4W		
R712,713			R92-0265-05	FUSE RESIST 5.6 J 1/4W		
R901			R92-0508-05	FUSE RESIST 22 G 1/4W		
VR1 ,2			R12-0606-05	TRIMMING POT.(330)		
VR21,22			R12-3686-05	TRIMMING POT.(22K)		
VR31,32			R12-3688-05	TRIMMING POT.(47K)		
VR952			R12-1619-05	TRIMMING POT.(4.7K)		
K1			S76-0027-05	MAGNETIC RELAY		
⚠ S702			S62-0001-05	SLIDE SWITCH	M	
A1			KAM02	HYBRID IC		
D1			HZS11N(B2)	ZENER DIODE		
D1			RD11ES(B2)	ZENER DIODE		
D2 -5			HSS104	DIODE		
D2 -5			1SS133	DIODE		
D31 ,32			HSS104	DIODE		
D31 ,32			1SS133	DIODE		
D101			HZS6.8N(B2)	ZENER DIODE		
D101			RD6.8ES(B2)	ZENER DIODE		
D401,402			HZS7.5S(B)	ZENER DIODE		
D401,402			RD7.5JS(B)	ZENER DIODE		
D403-405			1SS133	DIODE		
D501-504			HSS104	DIODE		
D501-504			1SS133	DIODE		
D551-554			S5688B	DIODE		
D551-554			1SR139-100	DIODE		
D555-557			HZS15S(B)	ZENER DIODE		
D555-557			RD15JS(B)	ZENER DIODE		
D559,560			HZS18N(B)	ZENER DIODE		
D559,560			RD18ES(B)	ZENER DIODE		
D701			D3SBA20F03	DIODE		
D701			RBV-402LFA	DIODE		
D702			S5688B	DIODE		
D702			1SR139-100	DIODE		
D703			HZS4.7N(B)	ZENER DIODE		
D703			RD4.7ES(B)	ZENER DIODE		
D704			HZS2.7N(B)	ZENER DIODE		
D704			RD2.7ES(B)	ZENER DIODE		
D705			HZS3.3N(B)	ZENER DIODE		
D705			RD3.3ES(B)	ZENER DIODE		
D721-730			HSS104	DIODE		
D721-730			1SS133	DIODE		
D731-734			HSS104A	DIODE		
D731-734			1SS131	DIODE		
D735-739			HSS104	DIODE		
D735-739			1SS133	DIODE		
D801-804			HSS104	DIODE		
D801-804			1SS133	DIODE		

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No. 6

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
D901,902			HSS104	DIODE		
D901,902			1SS133	DIODE		
D903,904			HSS104A	DIODE		
D903,904			1SS131	DIODE		
D905,906			HSS104	DIODE		
D905,906			1SS133	DIODE		
D921			HSS104	DIODE		
D921			1SS133	DIODE		
D922			HZS3.9N(B)	ZENER DIODE		
D922			RD3.9ES(B)	ZENER DIODE		
D923,924			HSS104	DIODE		
D923,924			1SS133	DIODE		
IC1			TA8125S	IC(2CH PRE AMP)		
IC21			NJM4565D-D	IC(OP AMP X2)		
IC31			UPC1297CA	IC(DOL HX PRO SYSTEM)		
IC41			TC4066BP	IC(ANALOG/ DIGITAL SW)		
IC41			XRU4066B	ANALOGUE IC		
IC42			NJM4565D-D	IC(OP AMP X2)		
IC51			TC9164N	IC(16CH BILATERAL SELECTOR SW)		
IC551			NJM4560D-N	IC(OP AMP X2)		
IC601,602			BA10393N	IC(DUAL COMPARATOR)		
IC603			BA6229	IC(MOTOR DRIVER)		
IC604			BA6209N	IC(MOTOR DRIVER)		
IC701			BA17812T	IC(VOLTAGE REGULATOR/ +12V)		
IC701			UPC7812AHF	IC(VOLTAGE REGULATOR/ +12V)		
IC705			CXP82324-176Q	MI-COM IC		
IC801			NJM4565D	IC(OP AMP X2)		
IC901			TA78057S	IC(VOLTAGE REGULATOR/+5.75V)		
IC902			S-80740AL	IC(VOLTAGE DETECTOR)		
IC951			BA6138	IC(ROOT AMP X2)		
Q1 ,2			2SC2458(Y,GR)	TRANSISTOR		
Q1 ,2			2SC3311A(Q,R)	TRANSISTOR		
Q3 ,4			DTC124ES	DIGITAL TRANSISTOR		
Q3 ,4			UN4212	TRANSISTOR		
Q5			2SC2458(Y,GR)	TRANSISTOR		
Q5			2SC3311A(Q,R)	TRANSISTOR		
Q21 ,22			2SC2878(B)	TRANSISTOR		
Q21 ,22			2SD1302(S,T)	TRANSISTOR		
Q25 -30			2SC2458(Y,GR)	TRANSISTOR		
Q25 -30			2SC3311A(Q,R)	TRANSISTOR		
Q103			2SA1048(Y,GR)	TRANSISTOR		
Q103			2SA1309A(Q,R)	TRANSISTOR		
Q301,302			2SC3311A(Q,R)	TRANSISTOR		
Q303			2SC3940A(R,S)	TRANSISTOR		
Q304-310			DTC124ES	DIGITAL TRANSISTOR		
Q304-310			UN4212	TRANSISTOR		
Q311			2SA1534A(R,S)	TRANSISTOR		
Q401-406			2SC3311A(Q,R)	TRANSISTOR		
Q401,402			2SC2458(Y,GR)	TRANSISTOR		
Q403-406			2SC3311A(Q,R)	TRANSISTOR		
Q551			2SD2012	TRANSISTOR		
Q551			2SD2061	TRANSISTOR		
Q552			2SB1370	TRANSISTOR		
Q552			2SB1375	TRANSISTOR		
Q553			DTC113ZS	DIGITAL TRANSISTOR		

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
Q553			UN4219	TRANSISTOR		
Q601			2SC3246	TRANSISTOR		
Q602,603			DTC113ZS	DIGITAL TRANSISTOR		
Q602,603			UN4219	TRANSISTOR		
Q701			2SB1370	TRANSISTOR		
Q701			2SB1375	TRANSISTOR		
Q702			2SA1048(Y,GR)	TRANSISTOR		
Q702			2SA1309A(Q,R)	TRANSISTOR		
Q711,712			2SC2458(Y,GR)	TRANSISTOR		
Q711,712			2SC3311A(Q,R)	TRANSISTOR		
Q721			DTC124ES	DIGITAL TRANSISTOR		
Q721			UN4212	TRANSISTOR		
Q722,723			DTA143TS	DIGITAL TRANSISTOR		
Q722,723			UN4116	TRANSISTOR		
Q724			DTC143TS	DIGITAL TRANSISTOR		
Q724			UN4216	TRANSISTOR		
Q725,726			DTA143TS	DIGITAL TRANSISTOR		
Q725,726			UN4116	TRANSISTOR		
Q727-731			DTC143TS	DIGITAL TRANSISTOR		
Q727-731			UN4216	TRANSISTOR		
Q732-734			DTA143TS	DIGITAL TRANSISTOR		
Q732-734			UN4116	TRANSISTOR		
Q801,802			2SC2878(B)	TRANSISTOR		
Q801,802			2SD1302(S,T)	TRANSISTOR		
Q901			2SC2458(Y,GR)	TRANSISTOR		
Q901			2SC3311A(Q,R)	TRANSISTOR		
Q951,952			DTC143TS	DIGITAL TRANSISTOR		
Q951,952			UN4216	TRANSISTOR		
MECHANISM ASSY (D40-1373-X5)						
301	2A	*	A10-3156-08	HEAD CHASSIS ASSY		
302	1B		A11-0769-08	MECHA BASE ASSY		
304	2C		D01-0160-08	FLYWHEEL		
305	1B		D10-3290-08	BRAKE ARM		
306	1A		D10-3292-08	EJECT LEVER		
307	1A		D10-3323-08	FRICTION ARM ASSY		
308	2B		D12-0143-08	MODE CAM		
309	1A		D12-0144-08	LOADING CAM		
310	1C		D12-0145-08	PCB HOLDER		
311	2B		D13-1503-08	GEAR		
312	2B		D13-1504-08	GEAR		
313	1A		D13-1505-08	GEAR		
314	1B,2B		D13-1506-08	REEL GEAR		
315	1A		D13-1509-08	GEAR		
316	1A		D13-1510-08	GEAR		
317	2C		D15-0335-08	PULLEY GEAR (MB)		
318	1B		D15-0336-08	PULLEY (LA)		
319	1A		D15-0339-08	PULLEY GEAR		
320	2B		D19-0270-18	REEL CAP		
321	2C		D23-0303-08	CAPSTAN SPACER		
322	2B		D23-0304-08	HOUSING ASSY		
323	2A		D90-0037-08	STEEL BALL		
325	1C		E30-2727-08	CONNECTOR WIRE 10P		
326	2A		E35-0576-08	E HEAD READ		
327	1C		E35-0911-08	MECHA WIRE 12P		

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328	2A	*	E35-1057-08	RP HEAD READ		
330	1C		F39-0066-08	HOLDER		
332	2A		G01-1244-08	HEAD SPRING		
333	1B		G01-3521-08	PULLEY GEAR SPRING		
334	1B		G01-3522-08	BRAKE ARM SPRING		
335	2B		G01-3523-08	REEL SPRING		
336	2B		G01-3524-08	BACK TENSION SPRING		
337	2A		G01-3527-08	HEAD SHASSIS SPRING		
338	1A		G01-3528-08	EJECT LEVER SPRING		
339	2C		G01-3529-08	EARTH SPRING		
340	2A		G01-3637-08	AZIMUTH SPRING		
341	2A		G01-3639-08	PINCH ROLLER SPRING		
342	1B	*	G01-3752-08	BACK TENTION SPRING		
343	2A		G02-1033-08	PRESS SP		
344	2B		G16-0790-08	MODE REFLECTOR		
345	1B,2B		G16-0791-08	REFLECTOR SEAL		
347	1A		J19-3521-08	LOADING HOLDER ASSY		
348	1C		J19-3550-08	CABLE HOLDER		
349	2A	*	J21-6161-08	HEAD BASE PLATE ASSY		
350	1B		J31-0853-08	COLLAR RIGHT		
351	1A		J31-0854-08	COLLAR LEFT		
352	1B,2B		J42-0191-08	REEL BUSH		
353	1A		J60-0022-08	ACETATE TAPE 9X20		
354	1C		J61-0095-08	SKB OPT TIE OP-80		
355	1B		J70-0320-08	MECHA PCB		
356	2A		J90-0695-08	CASSETTE GUIDE (B)		
358	1C,2B		N09-2871-08	TAPPING SCREW M2X6		
359	1A,2A		N09-2872-08	TAPPING SCREW M1.7X8		
360	1A		N09-2877-08	TAP TITE SCREW M2X4		
361	2A		N09-2951-08	AZIMUTH SCREW		
362	2A		N09-2962-08	BIND TAP TITE SCREW M2.6X6		
363	1B		N09-2963-08	TAP TITE SCREW M2X6		
364	2A		N09-2964-08	BINDING SCREW M2X9		
365	1A		N09-2966-08	TAP TITE SCREW M2X8		
366	2A		N09-3037-08	AZIMUTH SCREW		
367	2A		N09-3038-08	CHILT SCREW		
368	1C		N09-3042-08	BIND TAPPING SCREW		
369	2C		N19-1031-08	POLY WASHER /1.6X3.5X0.5		
370	1A,2A		N19-1242-08	POLY WASHER /2.1X5.0X0.5		
371	2C		N19-1321-08	POLY WASHER /2.6X6.0X0.25		
372	1B,2B		N19-1322-08	TEFRON WASHER /2.1X5.0X0.25		
373	1A		N19-1344-08	POLY WASHER /1.5X5.0X0.13		
374	2B		N19-1358-08	POLY WASHER /1.6X3.5X0.25		
375	2A	*	N19-1368-08	NYLON WASHER /2.43X5.0X0.5		
376	1A		N29-0206-04	E RING /2.0		
377	1B		N30-2604-46	PAN SCREW M2.6X4		
378	2A		N35-2004-46	BINDING SCREW M2X4		
380	1A,2A		S74-0011-08	SWITCH MLS-1		
381	1B,1C		S74-0016-08	SELECT SWITCH		
BA	2C		D16-0341-08	DRIVE BELT		
BM	2C	*	D16-0370-08	DRIVE BELT		
BR	1A		D16-0340-08	DRIVE BELT		
PF	2A		D14-0359-08	PINCH ROLLER ASSY		
EH	2A		T32-0326-08	ERACE HEAD		

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RPH	2A		T34-0344-08	REC/PLAY HEAD		
AM	1C		T42-0630-08	MOTOR MA ASSY		
MM	1C		T42-0653-08	MOTOR CAP ASSY		
RM	1C		T42-0655-08	MOTOR RA ASSY		
PHA	1C		T95-0125-08	PHOTO INTERRUPTER (SG107LF)		
PHB	1C		T95-0125-08	PHOTO INTERRUPTER (SG107LF)		
PHS	1C		T95-0125-08	PHOTO INTERRUPTER (SG107LF)		5
PHT	1C		T95-0125-08	PHOTO INTERRUPTER (SG107LF)		

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KX-5060S

SPECIFICATIONS

Track System	4-track, 2-channel stereo
Recording System	AC bias (Frequency: 105 kHz)
Heads	Playback / recording head 1
	Erasing head 1
Motors	DC motor × 3
Fast Winding Time	Approx. 90 seconds (C-60 tape)
Frequency Response:	
Normal Tape	20 Hz to 18,000 Hz, ± 3 dB
CrO_2 Tape	20 Hz to 18,000 Hz, ± 3 dB
Metal Tape	20 Hz to 19,000 Hz, ± 3 dB
Signal-to Noise Ratio:	
Dolby S NR ON	80 dB (metal tape)
Dolby C NR ON	74 dB (Metal tape)
Dolby B NR ON	67 dB (Metal tape)
Dolby NR OFF	58 dB (Metal tape)
Harmonic Distortion	Less than 1.7 % (at 1 kHz, 3rd H.D.Metal Tape)
Wow and Flutter	0.06 % (W.R.M.S.) ± 0.16 % (DIN)
Input sensitivity / Impedance:	
LINE IN	100 mV / 47 kΩ
Output Level / Impedance:	
LINE OUT	775 mV / 1 kΩ
Headphones	0.9 mW / 32 Ω
[GENERAL]	
Power Consumption	25 W
Dimensions	W: 440 mm (17-5 / 16")
	H: 127 mm (5")
	D: 276 mm (10-7 / 8")
Weight (Net)	4.4 kg (9.7 lb)

Note:
KENWOOD follows a policy of continuous advancements in development. For this reason specification may be changed without notice.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the general market (M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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