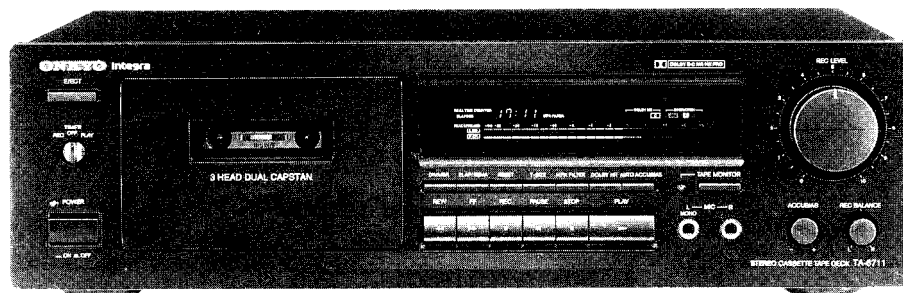


ONKYO® SERVICE MANUAL**CASSETTE TAPE DECK
MODEL TA-6711**

Black model / Silver model / Golden model

UP	230V AC, 50Hz
UD	120V AC, 60Hz
UW	120/220V AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

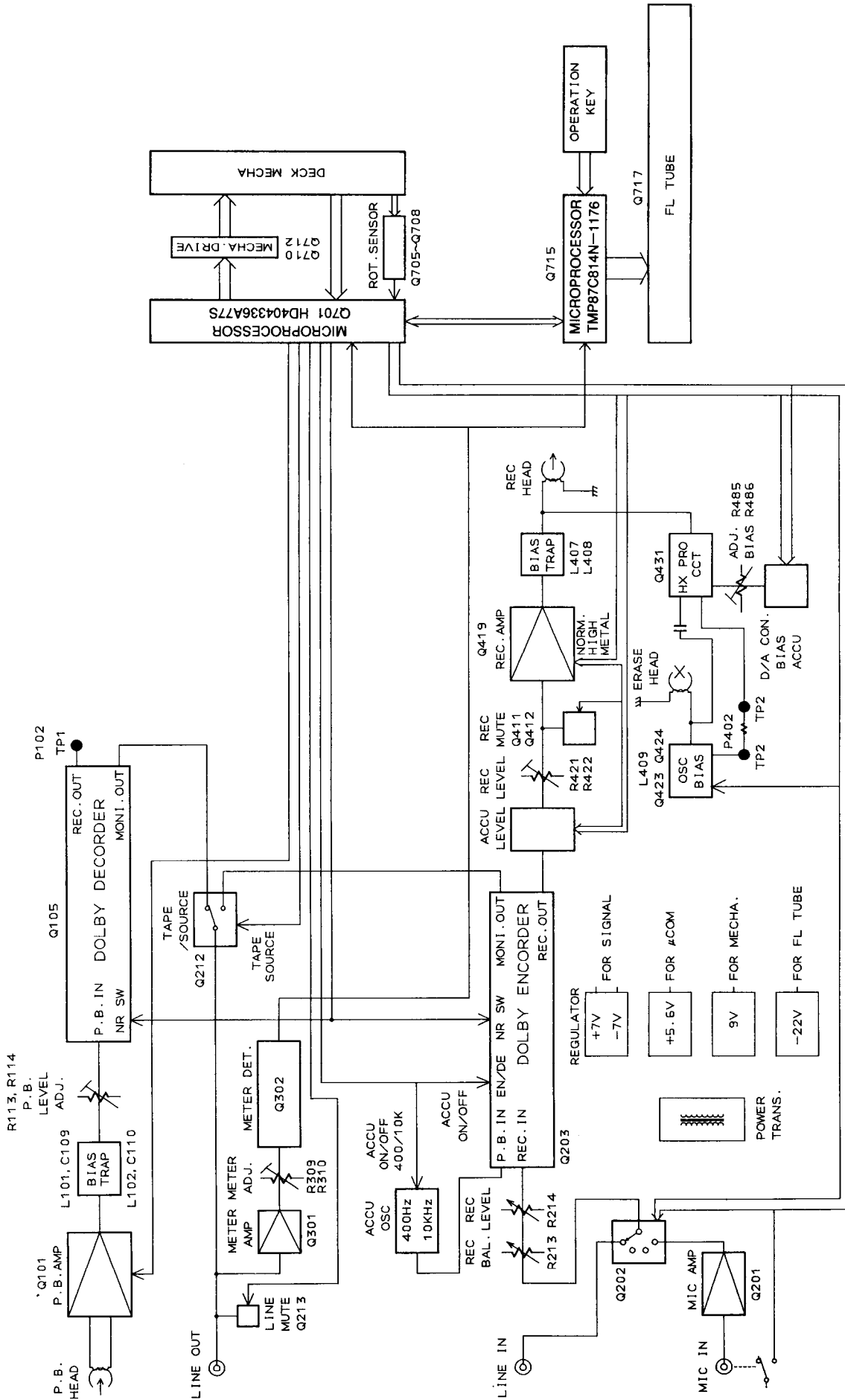
SPECIFICATIONS

Track Format:	4-tracks, 2-channels
Erasing System:	AC erase
Tape Speed:	4.8 cm/sec. (1 7/8 i.p.s.)
Wow and Flutter:	0.045% (WRMS) 0.09% (DIN)
Frequency Response:	20—18,000Hz (normal) (30—17,000Hz \pm 3dB) 20—19,000Hz (high) (30—18,000Hz \pm 3dB) 20—20,000Hz (metal) (30—19,000Hz \pm 3dB)
S/N Ratio:	60dB (metal tape, Dolby NR off) A noise reduction of 10dB above 5kHz and 5dB at 1kHz is possible with Dolby B NR. A noise reduction of 20dB at 5kHz is possible with Dolby C NR.
Input Jacks:	LINE IN: 2 Input sensitivity: 80 mV Input impedance: 40 kohms MIC IN: 2 Input sensitivity: 5 mV Input impedance: 50 kohms
Output Jacks:	LINE OUT: 2 Standard output level: 500 mV (0dB) Optimum load impedance: over 50 kohms
Motors:	DC servo motor: 1 DC motor: 2
Heads:	REC/PB: Special Hard Permalloy x 1 Erase head: Sendust x 1
Power Supply Rating:	U.S.A and Canadian models: AC 120 V 60 Hz European models: AC 230 V, 50Hz Worldwide models: AC 120 and 220-230 V, Switchable 50/60 Hz
Power Consumption:	16 watts
Dimensions:	435(W) x 131(H) x 370(D)mm 17-1/8" x 5-3/16" x 14-9/16"
Weight:	7.2 kg. (15.9 lbs.)

Specifications and external appearance are subject to change without notice because of product improvements.

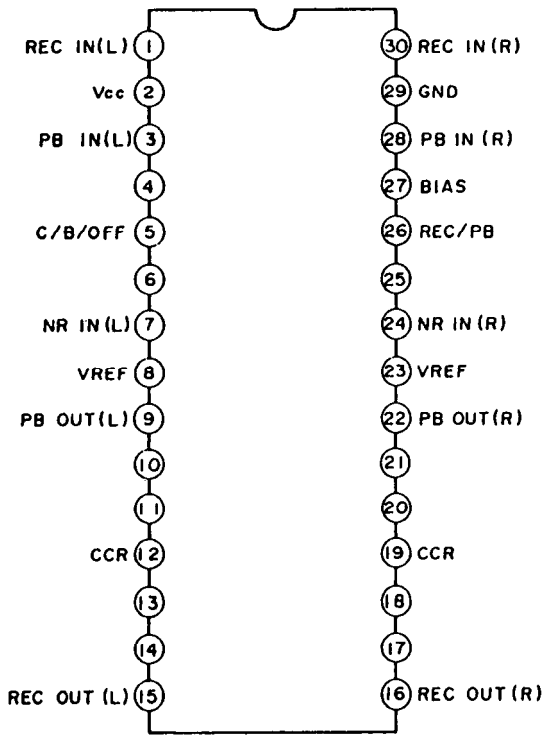
ONKYO®
AUDIO COMPONENTS

BLOCK DIAGRAM



IC BLOCK DIAGRAM

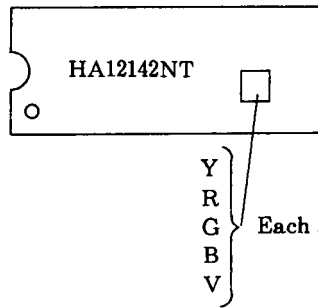
HA12142NT (DOLBY NR)



Precaution in case of replacing DOLBY IC

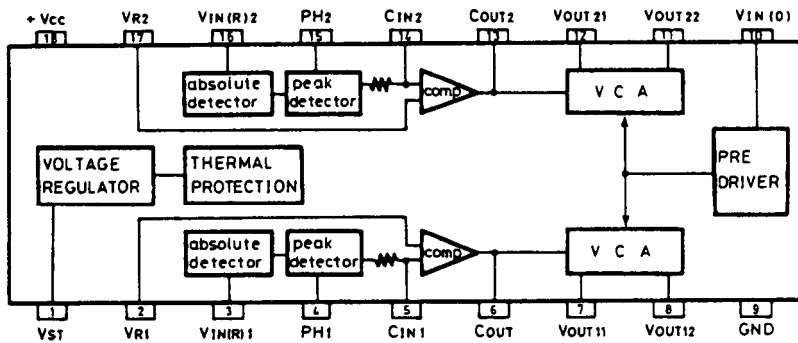
DOLBY IC(HA12142NT-01) can be divided into five standards. DECODER(Q131)and ENCODER(Q201)are used in pairs. So, please use the same standard IC when you replace one. SN (stock number) is in common with each other.

The displays of standard are as follows.



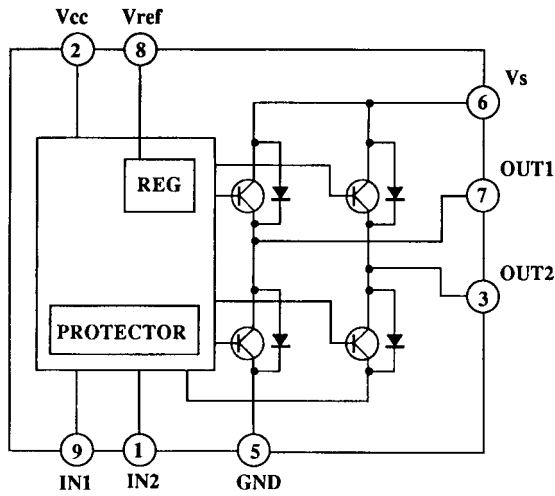
Each suffix stands for each standard.

μPC1297CA (HX PRO)



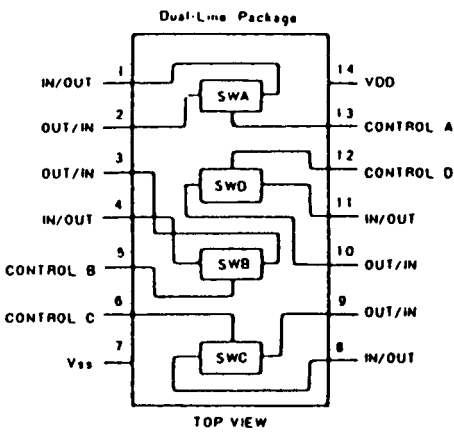
IC BLOCK DIAGRAM

TA7291S (MOTOR DRIVE)

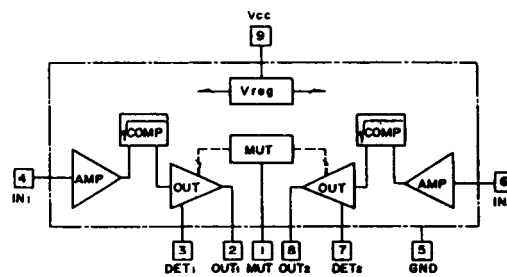


INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

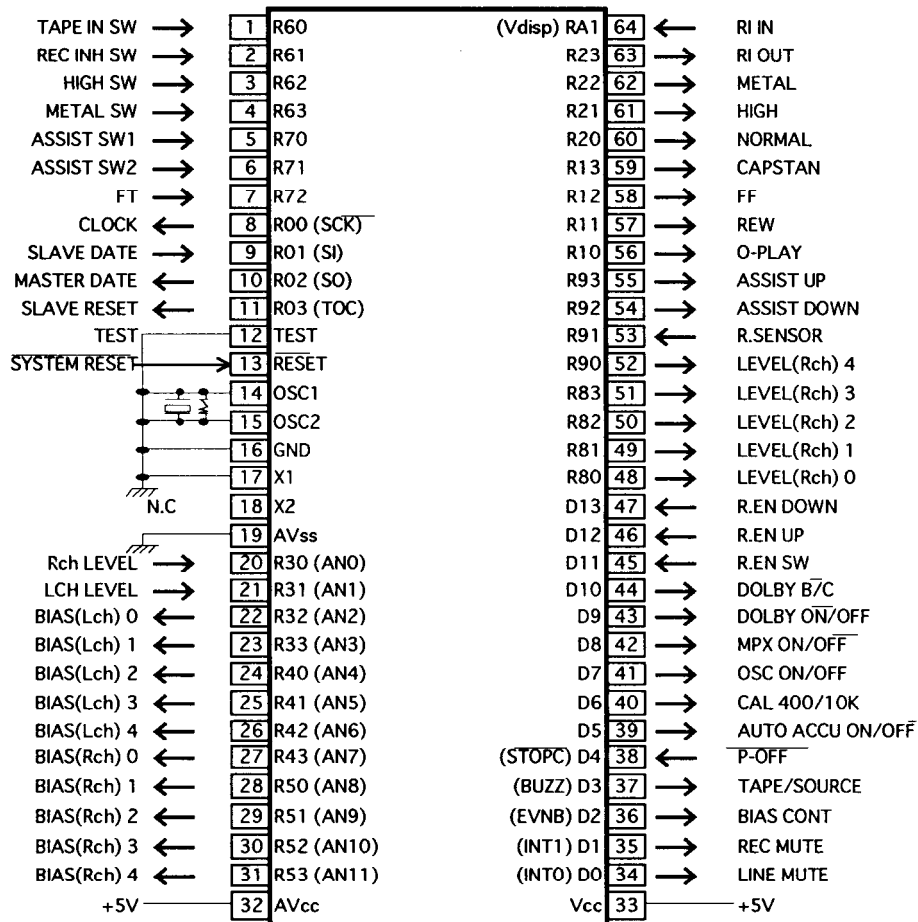
TC4066 (ANALOG SW)



BA6138 (METER DRIVE)



MICROPROCESSOR (HD404336A77S)



MICROPROCESSOR TERMINAL DESCRIPTION

PORT NO.	TERMINAL	I/O	DESCRIPTION
1	TAPE IN SW	I	TAPE IN DETECTION SWITCH INPUT TERMINAL. ACTIVE "L"
2	REC INH SW	I	RECORDING PREVENTION INPUT TERMINAL. ACTIVE "H"
3	HIGH SW	I	HIGH POSITION DETECTION SWITCH. ACTIVE "H"
4	METAL SW	I	METAL POSITION DETECTION SWITCH. ACTIVE "H"
5	ASSIST SW1	I	HEAD POSITON DETECTION SWITCH INPUT TERMINAL.
6	ASSIST SW2	I	HEAD POSITON DETECTION SWITCH INPUT TERMINAL.
7	FT	I	TEST TERMINAL. ACTIVE "L"
8	CLOCK	O	CLOCK SERIAL PORT OUTPUT TERMINAL.
9	SLAVE DATE	I	DATA INPUT TERMINAL FROM COUNTER MICROPROCESSOR TO MAIN MICROPROCESSOR.
10	MASTER DATE	O	DATA OUTPUT TERMINAL FROM MAIN MICROPROCESSOR TO COUNTER MICROPROCESSOR.
11	SLAVE RESET	O	COUNTER MICROPROCESSOR RESET SIGNAL OUTPUT TERMINAL. ACTIVE "L"
12	TEST		TEST TERMINAL. CONNECTED TO GND.
13	RESET		MICROPROCESSOR RESET SIGNAL INPUT TERMINAL.
14	4MHz		RESONATOR FOR SYSTEM CLOCK OSCILLATE TERMINAL.
15			RESONATOR FOR SYSTEM CLOCK OSCILLATE TERMINAL.
16	GND		POWER TERMINAL.
17			EXTERNAL CLOCK TERMINAL. CONNECTED TO GND.
18			EXTERNAL CLOCK TERMINAL. N.C
19	GND		POWER TERMINAL FOR A/D CONVERTER. CONNECTED TO GND.
20	Rch LEVEL	I	Rch LEVEL INPUT TERMINAL FOR SEARCH AND AUTO ACCU BIAS.
21	LCH LEVEL	I	Lch LEVEL INPUT TERMINAL FOR SEARCH.
22~26	BIAS(Lch) 0~4	O	Lch BIAS CONTROL SIGNAL OUTPUT TERMINAL.
27~31	BIAS(Rch) 0~4	O	Rch BIAS CONTROL SIGNAL OUTPUT TERMINAL.
32	+5V		POWER TERMINAL FOR A/D CONVERTER. CONNECTED TO +5V.
33	+5V		POWER TERMINAL.
34	LINE MUTE	O	OUTPUT TERMINAL FOR LINE MUTE CONTROL. ACTOVE "H"
35	REC MUTE	O	OUTPUT TERMINAL FOR REC MUTE CONTROL. ACTOVE "H"
36	BIAS CONT	O	OUTPUT TERMINAL FOR BIAS CONTROL. ACTOVE "H"
37	TAPE/SOURCE	O	TAP/SOURCE CAHNGE OVER OUTPUT TERMINAL. L=TAPE/H=SOURCE
38	P-OFF	I	POWER CUT DETECTION INPUT TERMINAL.
39	AUTO ACCU ON/OFF	O	
40	CAL 400/10K	O	OSC FREQUENCY CHANGE OVER OUTPUT TERMINAL FOR AUTO ACCU. H=400Hz/L=10kHz
41	OSC ON/OFF	O	OSC OSCILLATE CONTROL OUTPUT TERMINAL FOR AUTO ACCU. ACTIVE "H"
42	MPX ON/OFF	O	MPX FILTER CONTROL OUTPUT TERMINAL. ACTIVE "H"
43	DOLBY ON/OFF	O	DOLBY IC CONTROL OUTPUT TERMINAL. H=OFF/L=ON
44	DOLBY B/C	O	DOLBY IC CONTROL OUTPUT TERMINAL. H=C/L=B
45	R.EN SW	I	ROTARY ENCODER SWITCH.
46	R.EN UP	I	ROTARY ENCODER PULSE UP.
47	R.EN DOWN	I	ROTARY ENCODER PULSE DOWN.
48~52	LEVEL(Rch) 0~4	O	REC LEVEL CONTROL OUTPUT TERMINAL.
53	R.SENSOR	I	ROTATION PULSE INPUT TERMINAL.
54	ASSIST DOWN	O	ASSIST MOTOR CONTROL OUTPUT TERMINAL. ACTIVE "H"
55	ASSIST UP	O	ASSIST MOTOR CONTROL OUTPUT TERMINAL. ACTIVE "H"
56	O-PLAY	O	REEL MOTOR TORQUE CHANGE OVER OUTPUT TERMINAL. LOW TORQUE "H"
57	REW	O	REEL MOTOR CONTROL OUTPUT TERMINAL. ACTIVE "H"
58	FF	O	REEL MOTOR CONTROL OUTPUT TERMINAL. ACTIVE "H"
59	CAPSTAN	O	CAPSTAN MOTOR CONTROL OUTPUT TERMINAL. ACTIVE "H"
60	NORMAL	O	PLAY REC EQUALIZER CONTROL OUTPUT TERMINAL. ACTIVE "H"
61	HIGH	O	PLAY REC EQUALIZER CONTROL OUTPUT TERMINAL. ACTIVE "H"
62	METAL	O	PLAY REC EQUALIZER CONTROL OUTPUT TERMINAL. ACTIVE "H"
63	RI OUT	O	RI CODE OUTPUT TERMINAL. ACTIVE "H"
64	RI IN	I	RI CODE INPUT TERMINAL

ADJUSTMENT

PRECAUTION

- Before adjustment, clean the following parts with an alcohol moistend swab.
 - *record/playback head
 - *erase head
 - *pinch roller
 - *capstan
- Do not use magnetized screwdriver for adjustment.
- Demagnetize record/playback head with a head demagnetizer.

TEST EQUIPMENT/TOOL REQUIRED

- Audio oscillator
- Digital frequency counter
- Oscilloscope
- Attenuator
- AC voltmeter
- Non-magnetic screwdriver
- Test tapes
- TCC-153 : 10kHz, -15dB
- MTT-111N : 3kHz, -10dB
- MTT-150 : Dolby level calibration
400Hz, tone 200nWb/m

Item	Connection of instrument	Line input	Test tape	Mode	Output indicator	Adjustment point	Adjustment	Remarks
1	Tape speed Frequency counter to LINE output terminal		MTT-111N	PB	Frequency counter	Semi fixed resistor on the motor	3,000Hz±10Hz	
2	Head azimuth AC voltmeter and oscilloscope to LINE output terminal		TCC-153	PB	AC voltmeter	Head azimuth screw	Maximum level & Minimum phase error at channels L and R	Fig.1, Fig.3
3	Playback level AC voltmeter to terminals TP101		MTT-150	PB	AC voltmeter	R113 (L.ch) R114 (R.ch)	300mV	
4	Level meter AC voltmeter to terminals TP101		MTT-150	PB	Level voltmeter	R309 (L.ch) R310 (R.ch)	Level meter 0dB light ON	
5	OSC Block Frequency counter to TP401 lead-Wire loose coupling		METAL TAPE	REC	Frequency counter	L409	107kHz±1kHz	
6	HX-PRO DC voltmeter to terminals P105		METAL TAPE	REC	DC voltmeter	L411 (L.ch) L412 (R.ch)	Minimum	R485 R486 Maximum
7	Bias current Fig.2	1kHz,35mV & 12.5kHz 35mV	NORMAL TAPE	REC/ PB	AC voltmeter	R485 (L.ch) R486 (R.ch)	12.5kHz : +0.5dB ~ +1.5dB	
8	Recording level Fig.2	1kHz	NORMAL TAPE	REC/ PB	AC voltmeter	R421 (L.ch) R422 (R.ch)	1kHz : 350mV	

Blank tapes

- NORMAL UD-1 C-90
- HIGH XL-II C-90
- METAL XS C-60

- PLAY torque 30~70g/cm
- FF.REW torque 80~180g/cm
- Back tention 6~12g/cm

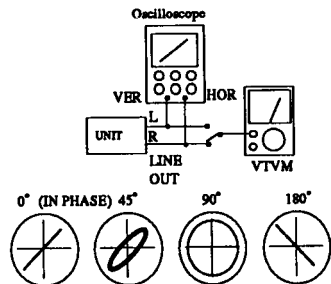


Fig.1 Confirming phase relationship

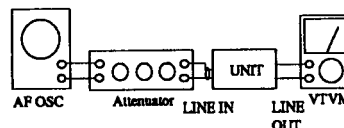


Fig. 2

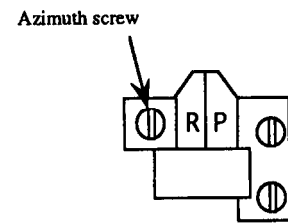


Fig.3



L411

L412

L409



PRINTED CIRCUIT BOARD - PARTS LIST

MAIN CIRCUIT PC BOARD (NAAR-5620-1)

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	ICS			DIODES	
Q101	222956	NJM2068D-D	D703	224470562	MTZJ5.6B, Zener
Q105,Q203	22240631	HA12142NT-01	D704	224470472	MTZJ4.7B, Zener
Q212	222840661	4066B	D705	224470753	MTZJ7.5C, Zener
Q301	222811	NJM4558D-D	D706	224470913	MTZJ9.1C, Zener
Q302	22240313	BA6138	D902,D903	224470823	MTZJ8.2C, Zener
Q419	22240369	M5218AP	D908	224471803	MTZJ18C, Zener
Q431	222959	MPC1297CA	D911,D921	224470562	MTZJ5.6B, Zener
Q432	22240369	M5218AP	D101	223222 or	WG713A or
Q701	22241009	HD404336A77S		223205 or	1SS270A or
Q710,Q712	22240239	TA7291S		223163	1SS133
Q904	222780565JRC	NJM78M56FA	D204-D206	223222 or	WG713A or
Q905	222780095MAT	AN78M09F		223205 or	1SS270A or
	TRANSISTORS			223163	1SS133
Q103,Q104	221299 or	DTC114TS or	D401-D406	223222 or	WG713A or
	2213600	RN1211		223205 or	1SS270A or
Q106	221281 or	DTC114YS or	D701,D702	223163	1SS133
	2213570	RN1207		223222 or	WG713A or
Q205-Q208	221281 or	DTC114YS or	D707-D709	223205 or	1SS270A or
	2213570	RN1207		223163	1SS133
Q211,Q213	221281 or	DTC114YS or		223222 or	WG713A or
	2213570	RN1207		223205 or	1SS270A or
Q214	2213354 or	2SA933S-R	D901	223163	1SS133
	2213355	2SA933S-S		22380022F or	RBV402 or
Q215,Q216	2211705 or	2SD655-E or	D904-D907	22380271F	D3SBA20
	2211706	2SD655-F		22380260 or	RL1N4003 or
Q303,Q304	221281 or	DTC114YS or	D909,D910	22380035	GP104003E
	2213570	RN1207		223222 or	WG713A or
Q401-Q410	221299 or	DTC114TS or		223205 or	1SS270A or
	2213600	RN1211		223163	1SS133
Q411,Q412	2213284 or	2SC1740S-R or		COILS, CERA ROCK	
	2213285	2SC1740S-S	L101,L102	231251J472	NCH-2486, 472J, CHOKE COIL
Q413-Q418	221281 or	DTC114YS or	L201,L202	233485	NMC-6086, MPX COIL
	2213570	RN1207	L301,L302	231251J472	NCH-2486, 472J, CHOKE COIL
Q421	221281 or	DTC114YS or	L401,L402	231251J822	NCH-2486, 822J, CHOKE COIL
	2213570	RN1207	L403,L404	231251J332	NCH-2486, 332J, CHOKE COIL
Q422	2212853 or	2SB1068-K or	L405,L406	231251J272	NCH-2486, 272J, CHOKE COIL
	2212855	2SB1068-U	L407,L408	231221	NTR-6507, TRAP COIL
Q423	2211544	2SC1959-Y	L409	231212	NLO-2057, OSC COIL
Q424	2211544	2SC1959-Y	L411,L412	231100	NCH-4147, CHOKE COIL
Q425,Q426	2213284 or	2SC1740S-R or	X701	3010150	CST4.00MGW, CERA ROCK
	2213285	2SC1740S-S		CAPACITORS	
Q427-Q430	221281 or	DTC114YS or		393344727	CE04W16V, 4700M, VX C
	2213570	RN1207	C913	393344727	CE04W16V, 4700M, VX C
Q433-Q435	221281 or	DTC114YS or	C914	393343327	CE04W16V, 3300M, VX C
	2213570T	RN1207	C921	393343327	CE04W16V, 3300M, VX C
Q702	221281 or	DTC114YS or	C922	393343327	CE04W16V, 3300M, VX C
	2213570	RN1207	C923	3500181	CE69W16V, 22000M, ELECT C
Q703	2213090 or	DTA114YS or	C924	393342227	CE04W16V, 2200M, VX C
	2213590	RN2207	C926	393342227	CE04W16V, 2200M, VX C
Q705,Q706	2213284 or	2SC1740S-R or		RESISTORS	
	2213285	2SC1740S-S	R113,R114	5210263	N06HR, 20KBC, TRIM R
Q707-Q709	221281 or	DTC114YS or	R309,R310	5210261	N06HR, 5KBC, TRIM R
	2213570	RN1207	R421,R422	5210262	N06HR, 10KBC, TRIM R
Q711	2211705 or	2SD655-E or	R463	443524704	RS1/2WBJ, 47, METAL O R
	2211706	2SD655-F	R485,R486	5210261	N06HR, 5KBC, TRIM R
Q901	2202724	2SB1569A-E	R494	443524704	RS1/2WBJ, 47, METAL O R
Q902	2202705 or	2SD2394-E or	R757	49163392407	RM1/10IJ, 3.9K×7, R NET
	2202706	2SD2394-F	R759	49163104405	RM1/10IJ, 100K×5, R NET
Q906	2213354 or	2SA933S-R or	R764	443521004	RS1/2WBJ, 10, METAL O R
	2213355	2SA933S-S	R768	453530224	RNU1/2WCJ, 2.2, METAL R
Q907	2213284 or	2SC1740S-R or	R901	443524704	RS1/2WBJ, 47, METAL O R
	2213285	2SC1740S-S	R908,R909	453530334	RNU1/2WCJ, 3.3, METAL R
Q908	2213354 or	2SA933S-R or	R916-R918	453530104	RNU1/2WCJ, 1, METAL R
	2213355	2SA933S-S			

CIRCUIT NO.	PART NO.	DESCRIPTION
PLUGS		
P101	25055136	NPLG-6P120
P102	25055038	NPLG-2P29
P204	25055133	NPLG-3P117
P401	25055138	NPLG-8P122
P402	25055038	NPLG-2P29
P705	25055146	NPLG-2P130
SOCKET		
P202A	2009990393UL	NSAS-6P0530
WIRE TRAPS		
JL201A	25055624	NPLG-3P586
JL701B	25055632	NPLG-11P594
JL702B	25055626	NPLG-5P588
JL706A	25055624	NPLG-3P586
JL708B	25055626	NPLG-5P588
JL902B	25050273	NSCT-9P101
WIRE HOLDER		
JL703B,JL704B	25051103	NSCT-9P890
J401A,J401B	25051107	NSCT-3P894
JACKS		
P201	25045425	NPJ-4PDBL250
P707	25045330	NPJ-2PDBL184
DISPLAY CIRCUIT PC BOARD (NADIS-5621-1)		
CIRCUIT NO.	PART NO.	DESCRIPTION
ICS		
Q715	22240960	TMP87C14N -1176
Q716	222801	MPA80C
TRANSISTORS		
Q718	2213090 or 2213590	DTA114YS or RN2207
FL TUBE		
Q717	212148	BJ434GK
DIODES		
D708,D709	223222 or 223205 or 223163	WG713A or 1SS270A or 1SS133
D711	225321	SLR-342VR, LED
CERA ROCK		
X702	3010190	CST8.00MTW
CAPACITOR		
C751	374721044	ECQ-V50V, 104J, TF C
SWITCHES		
P701-P714	25035652T	NPS-111-S604, PUSH SW
WIRE HOLDERS		
JL701A	25051095	NSCT-11P882
JL702A	25051089	NSCT-5P876

RECORDING LEVEL PC BOARD (NAETC-5622-1)

CIRCUIT NO.	PART NO.	DESCRIPTION
RESISTOR		
R214	5104260	N16RGL50KA25Z, VARIABLE
SOCKETS		
P203A	2009990396	NSAS-6P0533, SOCKET AS
P204A	2009990397	NSAS-6P0534, SOCKET AS

POWER SUPPLY PC BOARD (NASW-5624-1)

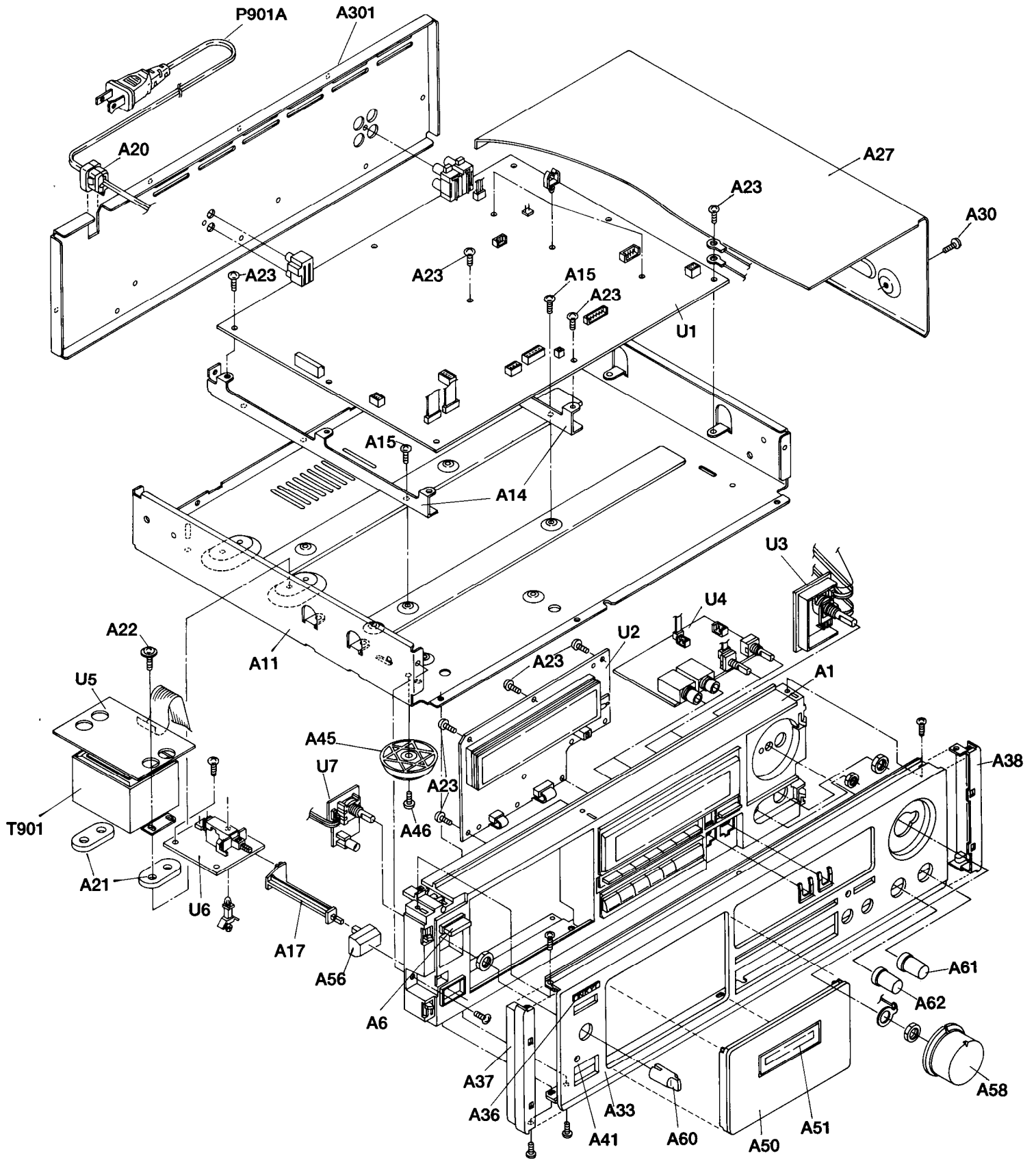
CIRCUIT NO.	PART NO.	DESCRIPTION
WIRE HOLDER		
JL902B	25051113	NSCT-9P900
SWITCH PC BOARD (NAPS-5625-1)		
CIRCUIT NO.	PART NO.	DESCRIPTION
SWITCH		
S901	△ 25035636	NPS-111 -L590P, POWER SW
PLUG		
P901	25055675	NPLG-2P631
CAPACITOR		
C901	3500191	DE7150FZ103M, AC400V/125V, IS C
INDICATOR PC BOARD (NASW-5626-1)		
CIRCUIT NO.	PART NO.	DESCRIPTION
SWITCH		
S702	25030387	NRS-113-20SBV, ROTARY SW
DIODE		
D712	225324C or 225324D	SEL6910A-C, LED or SEL6910A-D, LED
WIRE HOLDER		
JL706B	25051087	NSCT-3P874

MICROPHONE CIRCUIT PC BOARD (NAETC-5623-1)

CIRCUIT NO.	PART NO.	DESCRIPTION
ICS		
Q201	222811	NJM4558D-D
Q202	222840521TOS	4052B
CAPACITORS		
C201,C202	393380227	CE04W50V, 2.2M, VX C
C203,C204	374724724	ECQ-B50V, 472J, TF C
C205,C206	393341007	CE04W16V, 10M, VX C
C207,C208	374722215	ECQ-B50V, 221K, TF C
C209-C212	393380227	CE04W50V, 2.2M, VX C
RESISTOR		
R213	5104367	N09RLC250KMN20Z, VARIABLE
PLUGS		
P202	25055133	NPLG-3P117
P203	25055133	NPLG-3P117
JACKS		
P205	25045232	HLJ4307-01-3140
P206	25045232	HLJ4307-01-3140
ROTARY ENCODER		
S701	25030388	NRSF-112-20EC
WIRE HOLDERS		
JL201B	25051087	NSCT-3P874
JL708A	25051089	NSCT-5P876

NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

CHASSIS - EXPLODED VIEW



PARTS LIST

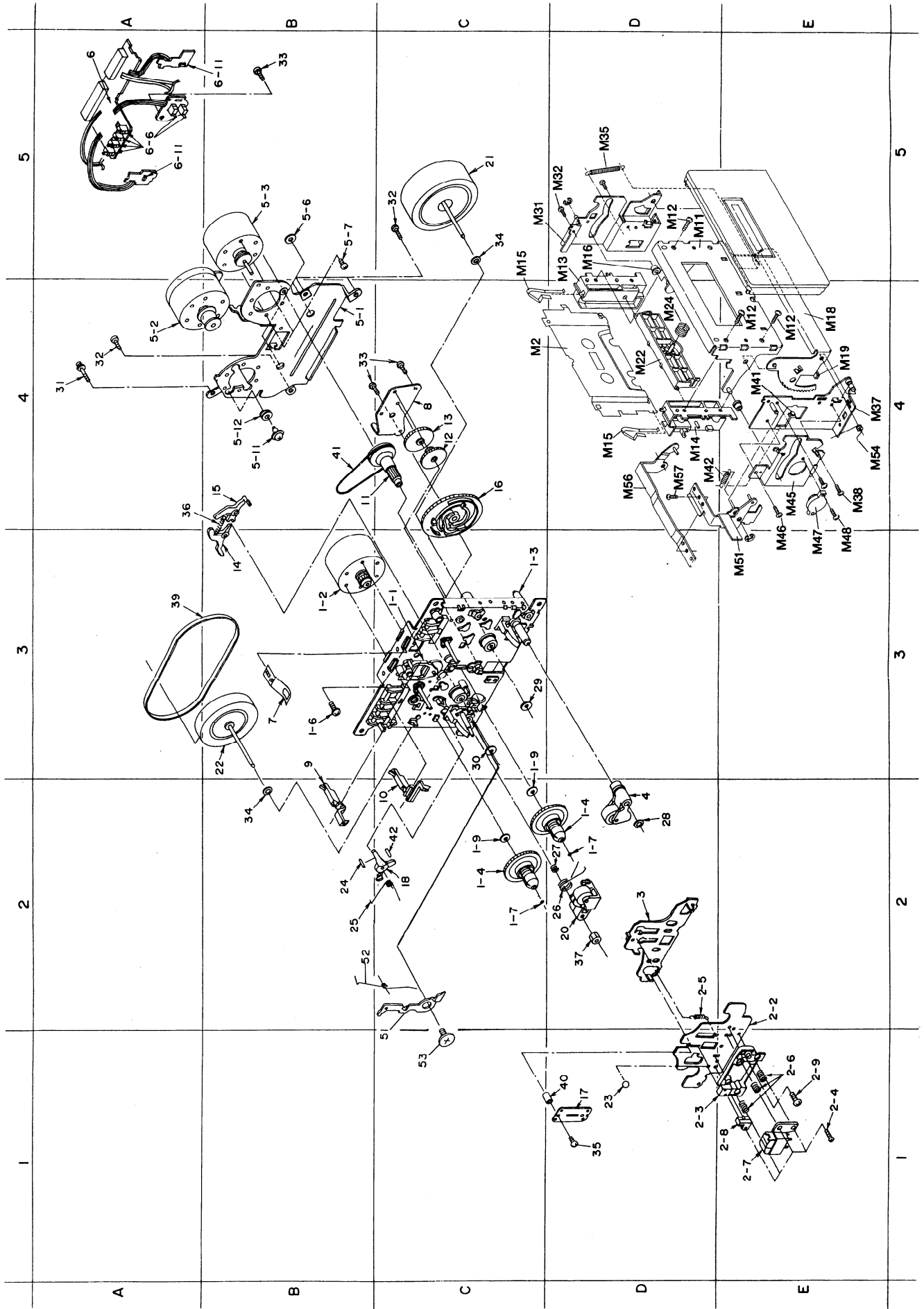
REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
A1	27110906A	FRONT BRACKET AS 	A56	28325264	KNOB (POW)AS
	27110908A	FRONT BRACKET AS <S>		28325265	KNOB (POW)AS <S>
	27110910A	FRONT BRACKET AS <G>		28325238	KNOB (POW)AS <G>
A2	838130088	3TTB+8B, SCREW	A58	28325253	KNOB (LEV)
A4	28133346-1	BACK PLATE 		28325254	KNOB (LEV) <S>
	28133347	BACK PLATE <S,G>		28325255	KNOB (LEV) <G>
A6	28325250	KNOB (EJ) 	A60	28324432	KNOB (TIM)
	28325251	KNOB (EJ) <S>		28325262	KNOB (TIM) <S>
	28325252	KNOB (EJ) <G>		28325263	KNOB (TIM) <G>
A9	28191732	CLEAR PLATE	A61	28325256	KNOB (BAL)
A11	27100309A	CHASSIS		28325257	KNOB (BAL) <S>
A12	838130088	3TTB+8B, SCREW		28325258	KNOB (BAL) <G>
A13	28141323	CUSHION	A62	28325259	KNOB (ACCU)
A14	27130767	BRACKET (PC)		28325260	KNOB (ACCU) <S>
A15	838130088	3TTB+8B, SCREW		28325261	KNOB (ACCU) <G>
A17	27273091B	JOINT (POW)	A301	27122164	REAR PANEL <D>
A19	27190480	HOLDER		27122165	REAR PANEL <P>
A20	△27300750	CORD BUSHING		27122166	REAR PANEL <W>
A21	27270327A	SPACER (PT)	A302	838430088	3TTB+8B(BC), SCREW
A22	830440109	4TTC+10C(BC), SCREW	P901A	△253192HIT	AS-UC6#18, AC CORD <D>
A23	838130088	3TTB+8B, SCREW		△253193HIT	AS-CEE, AC CORD <P(except E),W>
A24	880009	P-RIVET		△253198HIT	AS-BS, AC CORD <E>
A25	27270393	SPACER	T901	△2301145	NPT-1255D, POWER TRANSFORMER <N>
A26	28140722	CUSHION		△2301146	NPT-1255P, POWER TRANSFORMER <P>
A27	28184635	COVER 		△2301147	NPT-1255DG, POWER TRANSFORMER <W>
	28184636	COVER <S>	U1	1N231520-1	NAAR-5620-1
	28184637	COVER <G>	U2	1N231521-1A	NADIS-5621-1A <D>
A28	28141288	CUSHION		1N231521-1B	NADIS-5621-1B <P>
A29	838430088	3TTB+8B(BC), SCREW		1N231521-1C	NADIS-5621-1C <W>
A30	838440089	4TTB+8C(BC), SCREW	U3	1N231522-1A	NAETC-5622-1A <D>
	838240089	4TTB+8C(Ni), SCREW		1N231522-1B	NAETC-5622-1B <P>
A31	28141324	CUSHION		1N231522-1C	NAETC-5622-1C <W>
A33	27211771	FRONT PANEL 	U4	1N231523-1A	NAETC-5623-1A <D>
	27211772	FRONT PANEL <S>		1N231523-1B	NAETC-5623-1B <P>
	27211773	FRONT PANEL <G>		1N231523-1C	NAETC-5623-1C <W>
A34	838430088	3TTB+8B(BC), SCREW	U5	1N231524-1A	NASW-5624-1A <D>
A36	28135243	BADGE 		1N231524-1B	NASW-5624-1B <P>
	28135242	BADGE <S,G>		1N231524-1C	NASW-5624-1C <W>
A37	28125307	END CAP (L) 	U6	1N231525-1A	NAPS-5625-1A <D>
	28125309	END CAP (L) <S>		1N231525-1B	NAPS-5625-1B <P>
	28125311	END CAP (L) <G>		1N231525-1C	NAPS-5625-1C <W>
A38	28125308	END CAP (R) 	U7	1N231526-1A	NASW-5626-1A <D>
	28125310	END CAP (R) <S>		1N231526-1B	NASW-5626-1B <P>
	28125312	END CAP (R) <G>		1N231526-1C	NASW-5626-1C <W>
A40	27267898	GUIDE (LEV) 	Z1	1N231122	NDM-190, DECK MECHANISM
	27267899	GUIDE (LEV) <S>			
	27267900	GUIDE (LEV) <G>			
A41	28198836	FACET (POW)			<S> : Silver model only
A43	28140448	CUSHION			 : Black model only
A45	27175311	LEG AS			<G> : Golden model only
A46	831430088	3TTW+8B(BC), SCREW 			<D> : 120V model only
	838130088	3TTW+8B, SCREW <S,G>			<P> : 230V model only
A49	27301883	CASSETTE LID AS 			<W> : Worldwide model only
	27301884	CASSETTE LID AS <S>			<N> : American model only
	27301885	CASSETTE LID AS <G>			<C> : Canadian model only
A50	27301886A	CASSETTE LID (BASE) 			<E> : British model only
	27301887	CASSETTE LID (BASE) <S>			<T> : Taiwanese model only
	27301888	CASSETTE LID (BASE) <G>			
A51	28191733	CLEAR PLATE (CST)			

NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

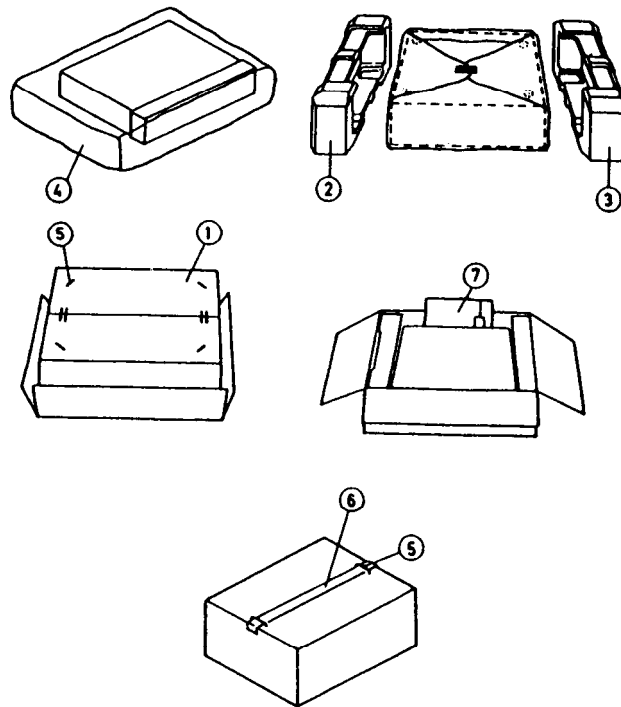
TAPE MECHANISM - PARTS LIST

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1-1	24602571	IDLER AS	M2	24607148A	DRESS BRD AS
1-2	F564-312	REEL MOTORAS	M11	24607139	FRONT PLATE AS
1-4	24602586	REEL BASE	M12	838430088	3TTB+8B(BC), SELF TAPPING SCREW
1-6	24609062	PAN HEAD SCREW 2.6×10	M13	24611619A	HOLDER (R)
1-7	24611177	PLASTIC WASHER 1.7×3.2×2×.25	M14	24611620A	HOLDER (L)
1-9	24611175	PLASTIC WASHER 2.1×7×.25	M15	27180435	SPRING
2	24611571	PLAY HEAD BLOCK	M16	24611621	ROLLER
2-2	24611572	HEAD BASE D	M18	24607141	ARM AS
2-3	24611573	HEAD SPACER	M19	28140892	CUSHION (T)
2-4	24609063	PAN HEAD SCREW 2.0×8	M20	8930301S	ES-3S, ES RING
2-5	24605784	SPRING (HEAD BASE)	M22	24611622A	HOLDER (ST)
2-6	24605785	SPRING	M23	24611457	CUSHION (A)
2-7	24600119	REC/PB HEAD	M24	27180461	SPRING (FLS)
2-8	24600120	ERASE HEAD	M31	24607145	BRACKET (R)AS
2-9	833126059	TAPPING SCREW CT 2.6×5	M32	833126047	2.6TTP+4S, SELF TAPPING SCREW
3	24611574	P BASE BLOCK	M35	24605805A	SPRING (B)
4	24602541	PINCH ROLLER AS	M37	24607143	BRACKET (L)AS
5-2	24601274	MAIN MOTOR	M38	833126047	2.6TTP+4S, SELF TAPPING SCREW
5-3	24601276	MOTOR MMN-6F4RB82	M39	8930301S	ES-3S, ES RING
5-6	24609070	WHEEL CATCH SCREW	M41	28140892	CUSHION (T)
5-7	24609065	PAN HEAD SCREW SW2.6×3	M42	24605804	SPRING (A)
5-11	24609056	SCREW (MOTOR)	M45	24607147	BRACKET (LL)
5-12	24611523	CUSHION (MOTOR)	M46	833126047	2.6TTP+4S, SELF TAPPING SCREW
6	24606521	PC BOARD C BLOCK	M47	24611623	DAMPER
6-6	24606271	PUSH SWITCH	M48	82142003	2P+3F(BC), SCREW
6-11	24606522	SPI-335-34	M51	24603423A	E-LEVER (L)AS
7	24605739	SPRING	M54	24605806	SPRING (E)
8	24607131	BRACKET (P.C.B.) H	M56	24603425	E-LEVER (R)AS
9	24603365A	LEVER (REC)	M57	833126047	2.6TTP+4S, SELF TAPPING SCREW
10	24603367	LEVER (METAL) L			
11	24602574	GEAR (A)			
12	24602575	GEAR (B)			
13	24602576	GEAR (C)			
14	24603393	BRAKE (L)			
15	24603394	SLIDE LEVER			
16	24602577	CAM GEAR (H)			
17	24605787	SPRING			
18	24611575	BT ARM			
20	24602581	PINCH ROLLER AS (L)			
22	24602583	FLY WHEEL TS (L)			
23	24611039	STEEL BALL			
24	24611576	FELT H			
25	24605793	BACK TENTION SPRING			
26	24605794	PINCH ROLLER SPRING			
27	24605795	HIGHT ADJUST SPRING			
28	24611554	WASHER 3.5×0.25			
29	24611555	OIL SEAL 2.4×0.25			
30	24611188A	WASHER (OIL SEAL)			
31	24609042	S-TIGHT SCREW M2.6×25			
32	838126080	SCREW 2.6×8			
33	838126060	SCREW 2.6×6			
34	24611041	PLASTIC WASHER 2.6×0.25			
35	833120079	PAN HEDSCREW TT2.6×7ZN			
36	24605788	SPRING (BRAKE)			
37	24611581	NYLON NUT			
39	24602584	MAIN BELT			
40	24611580	SPACER			
41	24602579	BELT			
42	24604101	BT ARM SH			
51	24607041B	ARM(PROTECT)L			
52	24605786	SPRING			
53	24609006A	SCREW			
	2009990300	NSAS-4P0434,PB HEAD WIRE			
	2009990299	NSAS-6P0433,REC & ERASE HEAD WIRE			

TAPE MECHANISM - EXPLODED VIEW



PACKING VIEW



REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	29052963	CARTON 	7	ACCESSORY BAG AS	
	29052964	CARTON <S>		29100097-1AY	320×250, POLY BAG
	29052965	CARTON <G>		29342247	INSTRUCTION MANUAL (U3) <C,T,W>
2	29091715	PAD (L)		29342246	INSTRUCTION MANUAL (U6) <P(except E,T)>
3	29091716	PAD (R)		29361759	UL/cUL LABEL <C>
4	29100105	POLY BAG		1N231701	LUG AS
5	282301	STAPLE		2010098A	PIN CORD
6	29110071	PP TAPE		2010200	3.5MINI PLUG, CORD AS
	29095608	t 2×200×40, SHEET		29365019BY	WARRANTY CARD <N>
	29360404	SN SHEET		29358002KY	SERVICE STATION LIST <N>
	261504	PAPER TAPE		29361936	UPC LABEL <D>
				25055040	CV PLUG <W>

<S> : Silver model only
 : Black model only
 <G> : Golden model only
 <D> : 120V model only
 <P> : 230V model only
 <W> : Worldwide model only
 <N> : American model only
 <C> : Canadian model only
 <E> : British model only
 <T> : Taiwanese model only

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