

# TC-H5600

## SERVICE MANUAL

*AEP Model  
UK Model  
E Model*




This unit is the cassette deck  
for the MHC-5600 component system.

Model Name Using Similar Mechanism	TC-WR97ES/WR870
Tape Transport Mechanism Type	TCM-200R8

### SPECIFICATIONS

Recoding system	4-track 2-channel stereo
Frequency response	(DOLBY NR OFF) 30 – 14,000 Hz ( $\pm 3$ dB), using TYPE I cassette (Sony HF-S) 30 – 15,000 Hz ( $\pm 3$ dB) using TYPE II cassette 30 – 16,000 Hz ( $\pm 3$ dB) using TYPE IV cassette
Wow and flutter	0.06% WRMS $\pm$ 0.16% (DIN)
Inputs	PHONO (phono jacks): sensitivity 5 mV impedance 47 kohms VIDEO (phono jacks): sensitivity 300 mV impedance 47 kohms

Design and specifications subject to change  
without notice.

Dolby noise reduction manufactured under license from  
Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol  are trademarks of  
Dolby Laboratories Licensing Corporation.

### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

### Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.



STEREO CASSETTE DECK  
**SONY**<sup>®</sup>



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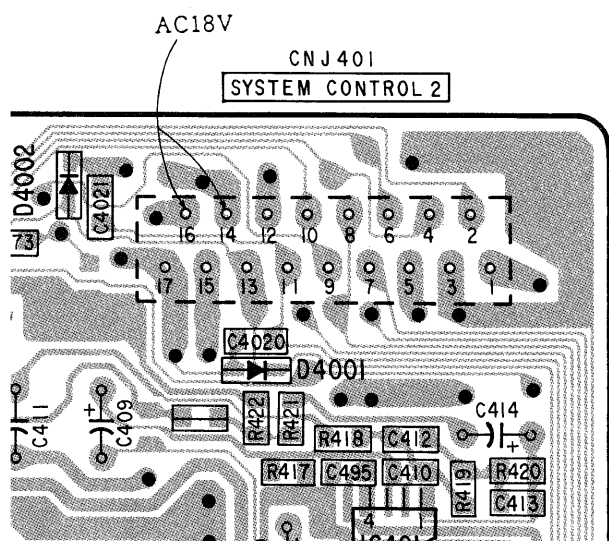
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## SAFETY-RELATED COMPONENT WARNING!!

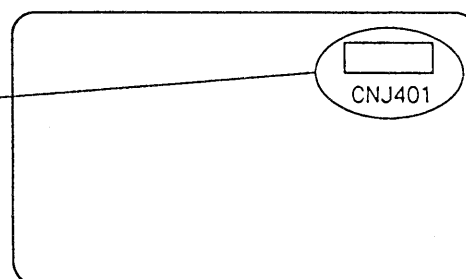
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## Caution when repairing

Normally the power of this set is supplied from the TA-H5600 amplifier connected. When only this set is repaired, connect the power of 18V AC as shown in the figure below.



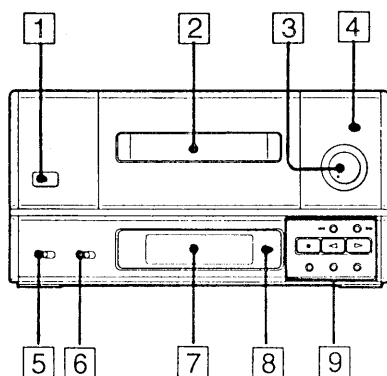
【PIN JACK BOARD】 (conductor side)



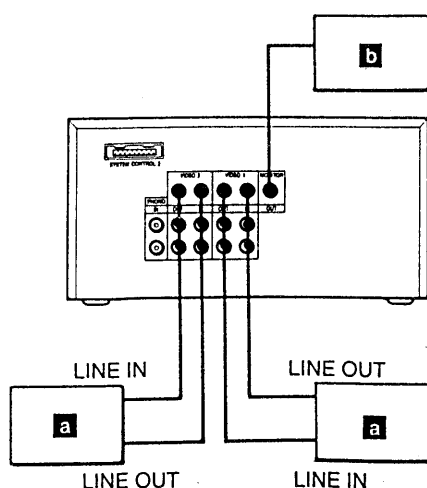
## SECTION 1 GENERAL

This section is extracted from instruction manual.

### LOCATION AND FUNCTION CONTROLS



- 1 OPEN/CLOSE button
- 2 Cassette holder
- 3 REC LEVEL (recording level) control
- 4 AUTO REC LEVEL (automatic recording level) button
- 5 DOLBY NR (Dolby Noise Reduction) button
- 6 DIRECTION MODE button
- 7 Display window
- 8 COUNTER RESET button  
Resets the counter of the cassette deck to "0".
- 9 Tape operation buttons
  - : Fast winding
  - : Stop
  - : Forward play
  - : Reverse play
  - : PAUSE
  - : MUTE (Muting)
  - : REC (recording)

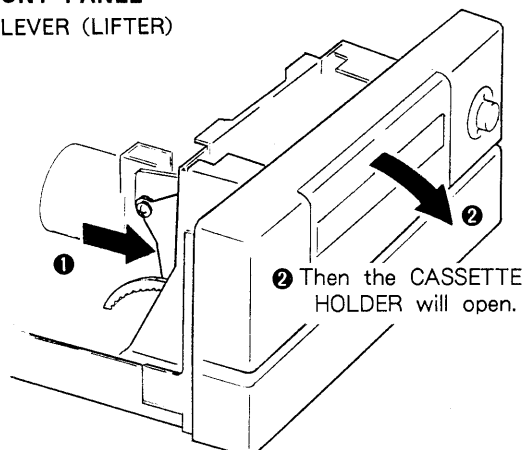


You can connect a VCR **a** to the VIDEO 1 or VIDEO 2 jacks. You can also connect a monitor TV **b** to MONITOR OUT. (TV with MONITOR IN jacks only.) To select VCR, press the VIDEO FUNCTION selector and light up the VIDEO 1 or VIDEO 2 indicator.

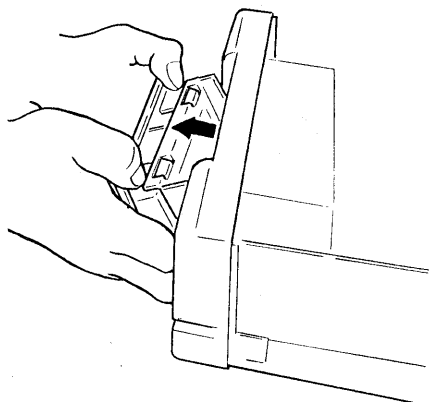
## SECTION 2 DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

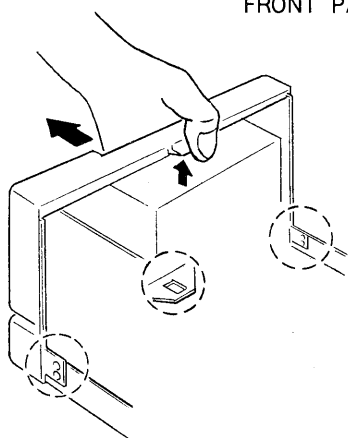
### • FRONT PANEL LEVER (LIFTER)



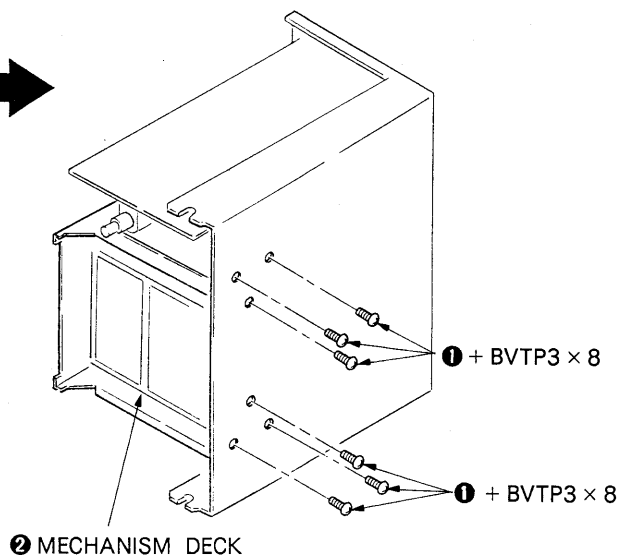
### CASSETTE LID



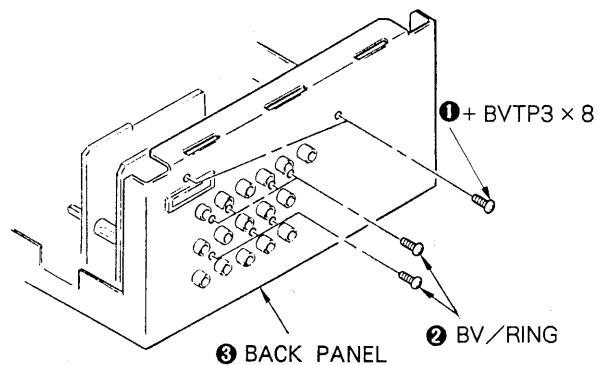
### FRONT PANEL



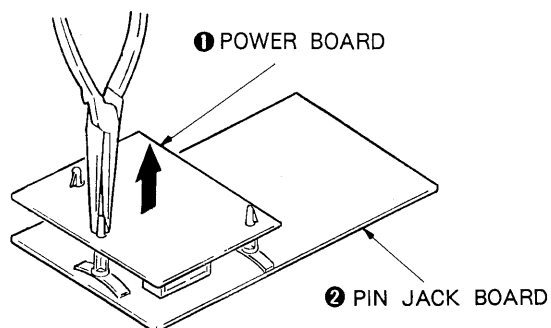
### • MECHANISM DECK



### • PIN JACK/POWER BOARD



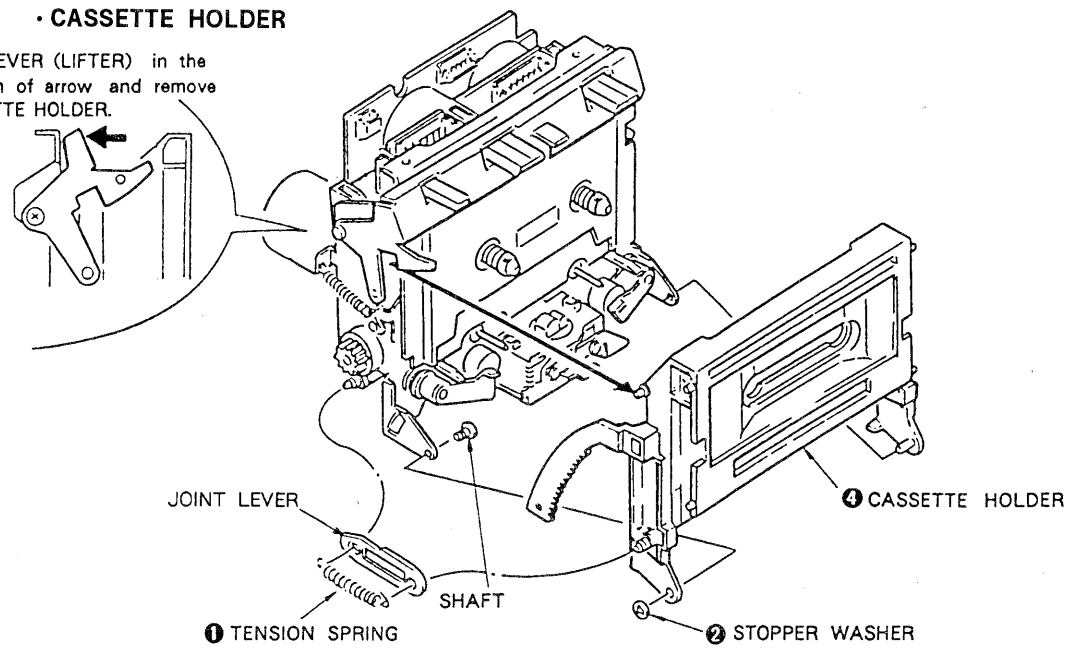
### ① POWER BOARD





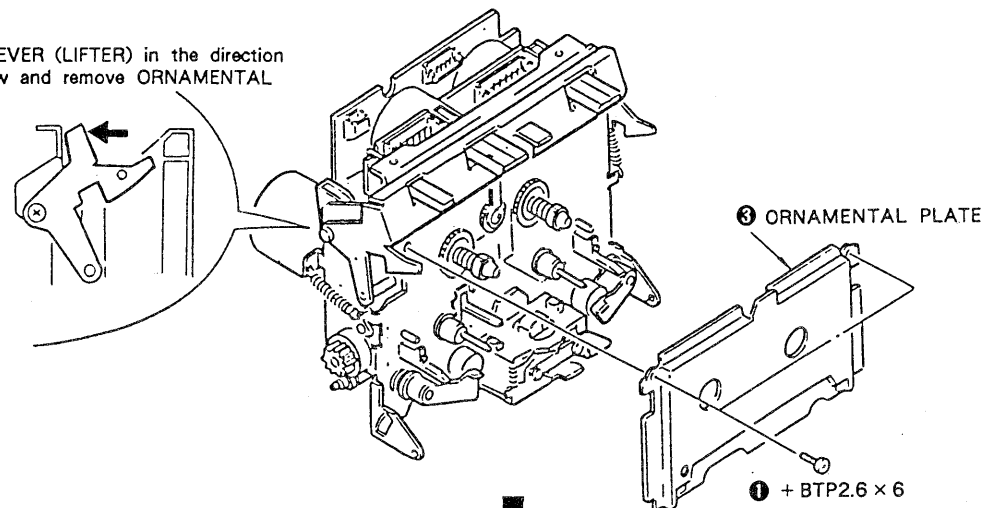
## • CASSETTE HOLDER

- ③ Push LEVER (LIFTER) in the direction of arrow and remove CASSETTE HOLDER.



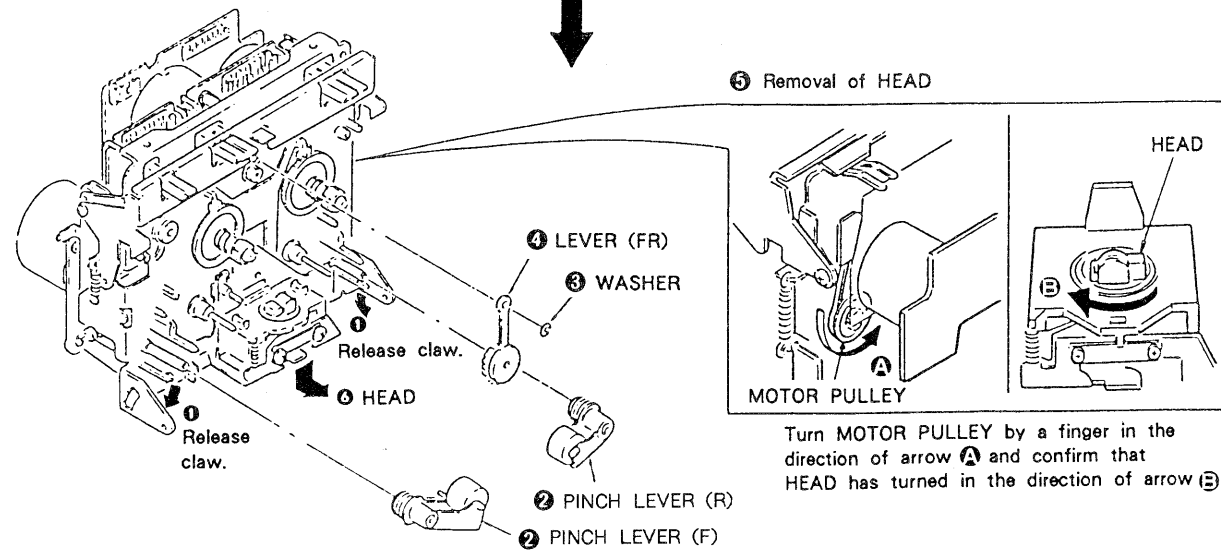
## • ORNAMENTAL PLATE

- ② Push LEVER (LIFTER) in the direction of arrow and remove ORNAMENTAL PLATE.



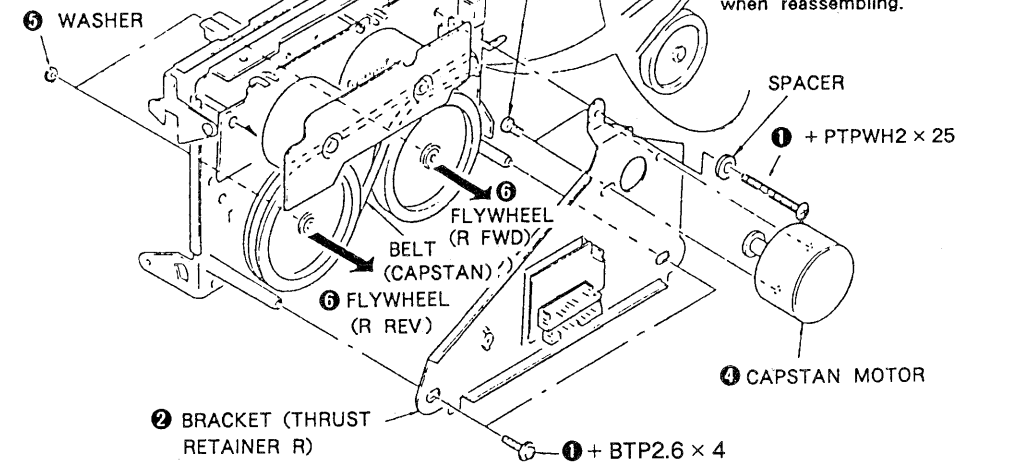
## • PINCH LEVER/HEAD

## ⑤ Removal of HEAD

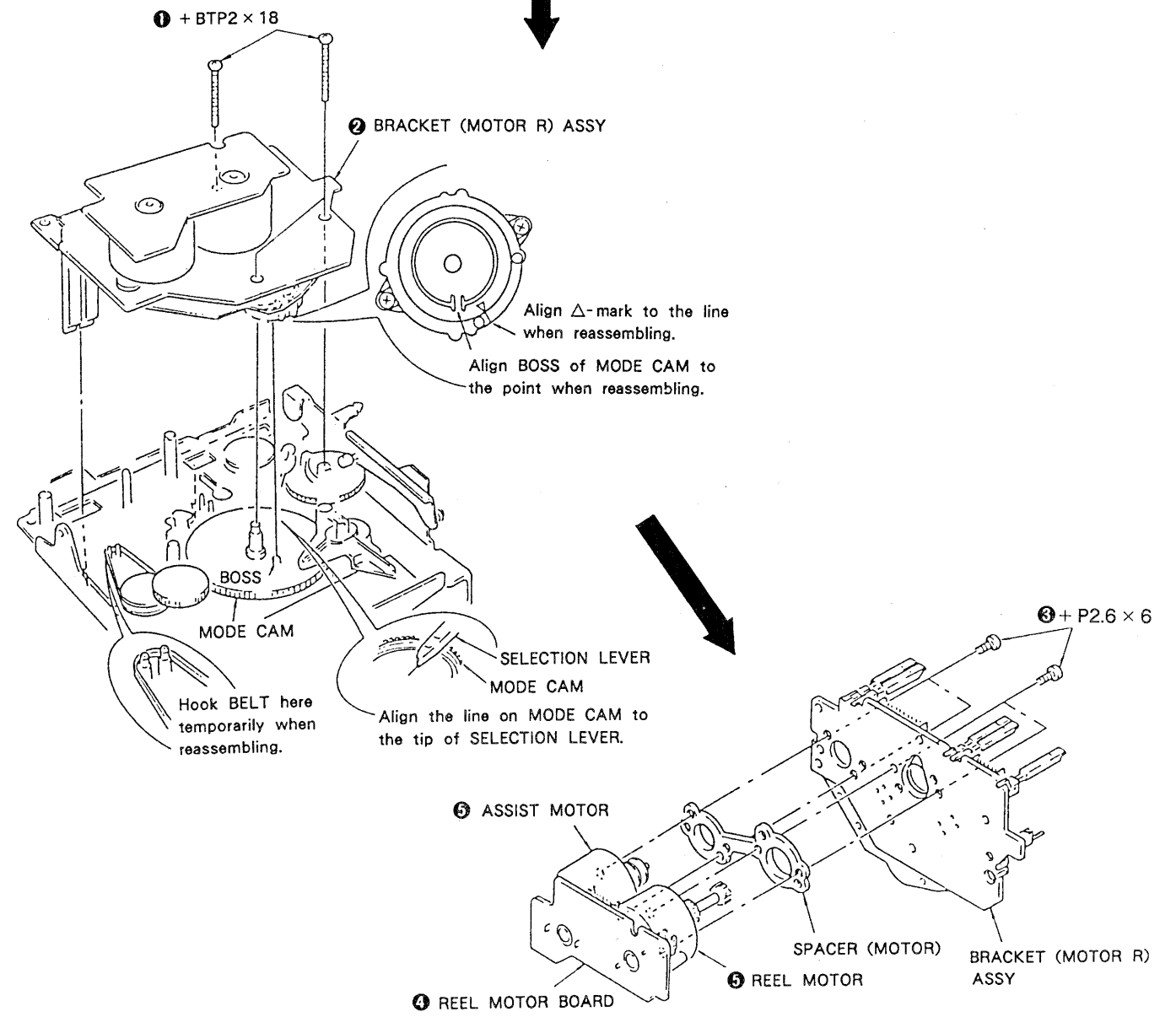


## CAPSTAN MOTOR/FLYWHEEL

- ③ SCREW, FITTING REINFORCEMENT



## REEL and ASSIST MOTORS



SECTION 3  
MECHANICAL ADJUSTMENTS

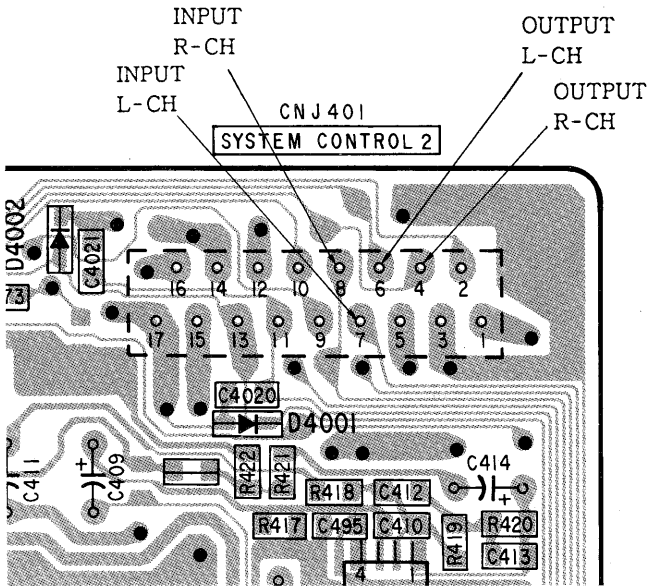
PRECAUTION

- 1. Clean the following parts with a denatured alcohol-moistened swab:
  - record/playback head      pinch roller
  - erase head                  rubber belts
  - capstan                      idlers
- 2. Demagnetize the record/playback head with a head demagnetizer.  
(Head demagnetizer do not approach for the erase head.)
- 3. Do not use a magnetized screwdriver for the adjustment.
- 4. After the adjustments, apply suitable locking compound to the parts adjusted.
- 5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	30 to 60g·cm (0.42to 0.83 oz·inch)
Forward back tension	CQ-102C	1 to 5g·cm (0.014 to 0.069oz·inch)
Reverse	CQ-102RC	30 to 60g·cm (0.42 to 0.83oz·inch)
Reverse back tension	CQ-102RC	1 to 5g·cm (0.014 to 0.069oz·inch)
Forward, Reverse	CQ-201B	65 to 90g·cm (0.9 to 1.25 oz·inch)

LINE IN/OUT Terminal (CNJ401)



SECTION 4  
ELECTRICAL ADJUSTMENTS

PRECAUTION

- 1. The adjustment should be performed in the publication.  
(Be sure to make playback adjustment at first.)
- 2. The adjustment and measurement should be performed for both L-CH and R-CH.
  - Switch position  
DOLBY NR switch : OFF  
DIR MODE switch : ⇄

Test Tape

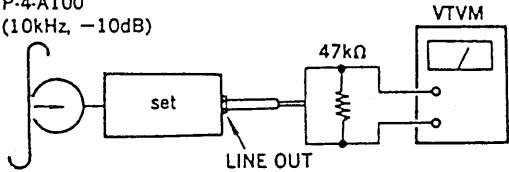
Tape	Contents	Use
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

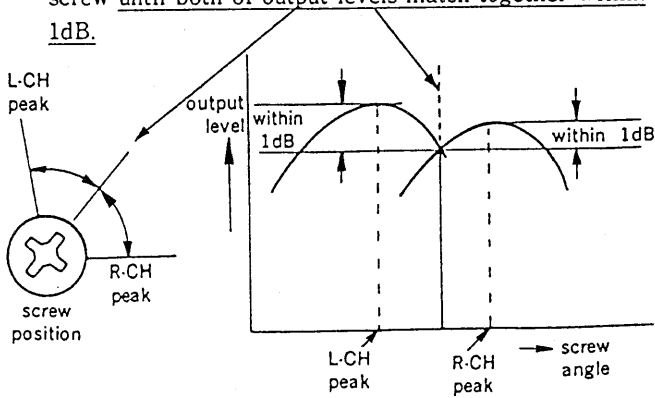
Procedure:

- 1. Forward Playback Mode

test tape  
P-4-A100  
(10kHz, -10dB)

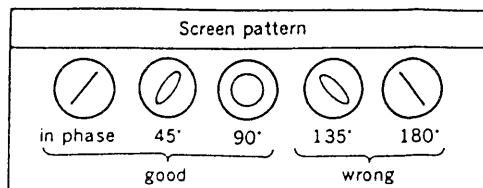
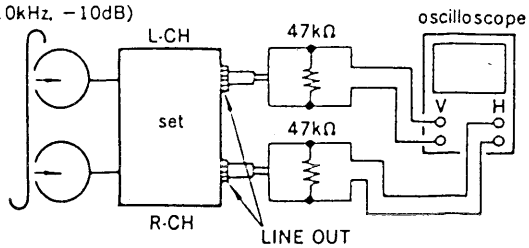


- 2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.



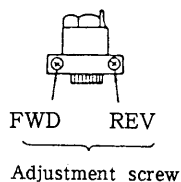
### 3. Playback Mode

test tape  
P-4-A100  
(10kHz, -10dB)



4. Change the reverse playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location : - record/playback head -

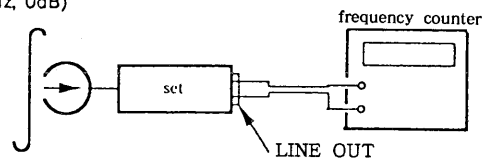


### Tape Speed Adjustment

Procedure :

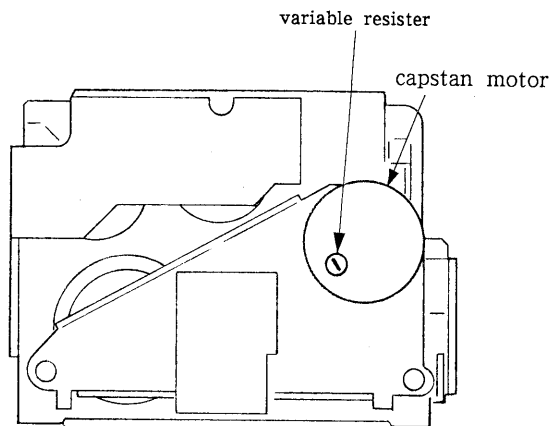
-Forward Playback Mode-

test tape  
WS-48B  
(3kHz, 0dB)



1. Set to FWD playback mode.
2. Adjust motor rear side (variable resistor) so that the frequency counter reading becomes  $3,000 \pm 15\text{Hz}$ .

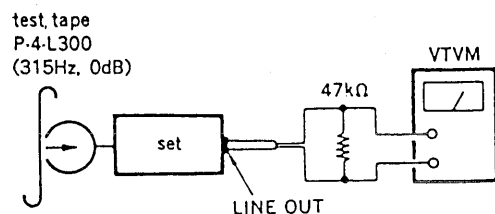
Adjustment Location : - capstan motor -



## Playback Level Adjustment

### Procedure :

#### —Forward Playback Mode—



Adjustment RV101 (L-ch) and RV201 (R-ch) so that the reading on VTVM meets the adjustment limits below.

### Adjustment Limit :

LINE OUT level :  $-10 \pm 0.5\text{dB}$  (0.23 to 0.26V)

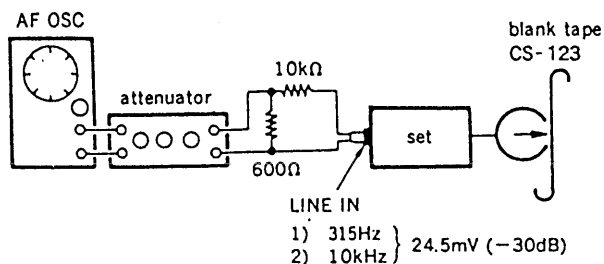
Level Difference between Channels : within 0.5dB

Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

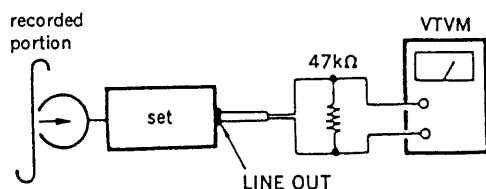
## Record Bias Adjustment

### Procedure :

#### 1. Record Mode



#### 2. Playback Mode



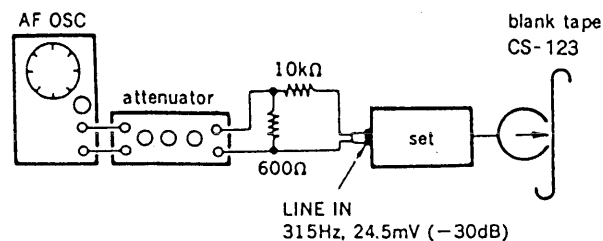
Playback the signal recorded in step 1.

Confirm that the 10kHz playback output is  $0 \pm 0.5\text{dB}$  relative to the 315Hz output. If necessary, adjust RV103 (L-CH), RV203 (R-CH) and repeat the steps given above.

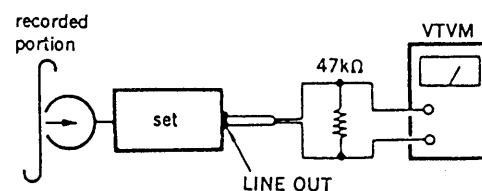
## Record Level Adjustment

### Procedure :

#### 1. Record Mode



#### 2. Playback Mode



Confirm playback the tape recorded become adjustment level as follows.

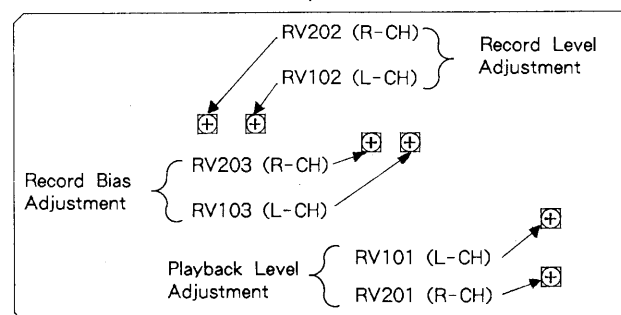
If necessary, adjust RV102 (L-CH), RV202 (R-CH) and repeat steps 1 and 2.

### Adjustment Limits :

LINE OUT level :  $-30 \pm 0.5\text{dB}$  (23 to 26mV)

### Adjustment Location :

【MAIN (B) BOARD】 — component side —



## SECTION 5

### DIAGRAMS

#### 5-1. IC PIN DESCRIPTION

IC601 display microprocessor HD614023FA89

Fluorescent lamp indicator is activated by receiving data from IC702 (system controller).

Pin	Pin Name	I/O	Description
1~11	k-a	O	FL indicator tube(FL601)segment output.
12			Not used(+5.6 V).
13	VDISP	—	Power supply for activating the FL indicator tube(-22 V).
14~25		I	Not used(GND).
26	Vcc	—	Power supply terminal(+5.6 V).
27	CLK	I	Data transmission clock input from IC702(system controller).
28	DATA	I	Serial data input from IC702(system controller).
29	SYNC	I	Sync signal input which indicates the first byte of data sent from IC702(system controller).
30			Not used(GND).
31	SAF	O	LED(D601)light output in the AUTO REL LEVEL.
32~35		O	Not used.
36~42			Not used(GND).
43	RESET	I	Reset input from IC702(system controller). "L": Reset.
44	TEST	I	Not used(+5.6V).
45	OSC1	I	Clock input(4.19MHz).
46	OSC2	O	Clock output.
47	GND	—	Power supply terminal(GND).
48~50			Not used(GND).
51			Not used(Pull-up).
52			Not used.
53~57	1G-5G	O	FL indicator tube(FL601)grid output.
58~59		O	Not used.
60~64	p-1	O	FL indicator tube(FL601)segment output.

IC406 selector controller M50760-315FP

AV output is switched with the audio bus signal sent from the amplifier (TA-H5600).

Pin	Pin Name	I/O	Description
1	D3	I	Model selection input port. Connected to GND.
2	A0	O	Audio IN switch(IC403 and IC404)control output port.
3			Not used.
4	A1	O	Audio IN switch(IC403 and IC404)control output port.
5	CNVss	—	Power supply terminal(GND).
6	Vss	—	Power supply terminal(GND).
7	A2	O	Audio IN switch(IC403 and IC404)control output port.
8	B0	O	Audio OUT switch(IC405)control output port.
9	B1	O	Audio OUT switch(IC405)control output port.
10			Not used.
11	V0	O	Video IN/OUT switch(IC407)control output port.
12	V1	O	Video IN/OUT switch(IC407)control output port.
13~14			Not used(GND).
15			Not used.
16	RESET	I	Reset input. "L": Reset
17	XOUT	O	Clock output.
18	XIN	I	Clock input.
19	S	I	Serial data input(audio bus).
20	D0	I	Serial data input(audio bus).
21	D1	I	Model selection input port. Connected to +5 V(pull up).
22			Not used.
23	D2	I	Model selection input port. Connected to GND.
24	V <sub>DD</sub>	—	Power supply terminal(+5 V).

## IC702 system controller M50944-155SP

The system is wholly controlled by communication between IC601 (display microprocessor) and IC701 (mechanism controller).

Pin No.	Pin Name	I/O	Description
1	VREF	I	A/D input port reference voltage input(+5.6 V).
2	MET - R	I	Level meter Rch input(analog)from the meter amplifier(IC305).
3	MET - L	I	Level meter Lch input(analog)from the meter amplifier(IC305).
4	VOL A/D	I	REC LEVEL VOLUME(RV301)position detect input(analog).
5		—	Not used.
6	KEY4	I	Key switch input(analog).
7	KEY3	I	Key switch input(analog).
8	KEY2	I	Key switch input(analog).
9	KEY1	I	Key switch input(analog).
10	SYNC	O	Sync signal output which indicates the first byte of data sent to IC601.
11	FL SK	O	Data transmission clock output to IC601.
12	FL SO	O	Serial data output to IC601.
13	AUB OUT	O	Audio bus output.
14	AUB IN	I	Audio bus output(negative edge).
15	POW IN	I	Not used(pull up).
16	PB SEL	O	Not used(open).
17	AMS SEL	O	Not used(open).
18	MD REQ	I	Data request input from IC701.
19	MD SCLK	O	Data transmission clock output to IC701.
20	MD SO	O	Serial data output to IC701.
21	MD SI	I	Serial data input from IC701.
22	RES OUT	O	Reset signal output to IC601.
23		—	Not used(open).
24	AUB IN	I	Audio bus input(positive edge).
25		—	Not used(open).
26	GND	—	Power supply terminal(GND).
27	RES	I	System reset input. "L": Reset.
28	XIN	I	Clock input(4 MHz).
29	XOUT	O	Clock output.
30,31		—	Not used(open).
32	Vss	—	Power supply terminal(GND).
33	φ	—	Not used(open).
34	TEST 2	I	Test mode setting input. This set enters into the test mode when the power is on and it is set to "L"(CNP703 is shortened)*1
35	TEST 1	I	Not used(GND).
36,37	VERSEL	I	Not used(+5.6 V).
38		—	Not used(open).
39	POW ON	I	Not used(GND).
40	VOL LED	O	Volume LED ON/OFF output. "L": light up.
41	VOL -	O	Volume moter(RV301)down control output for IC706.
42	VOL +	O	Volume moter(RV301)up control output for IC706.
43	VOL SPD	O	Volume moter speed control output. "H": SLOW,"L": FAST.
44~47		O	Not used(open).
48	BIAS 4	O	Tape bias select output. "L": Metal.
49	BIAS 2	O	Tape bias select output. "L": CrO2.
50	BIAS 1	O	Tape bias select output. "L": Normal.
51	RMUTE	O	REC mute control output.
52		O	Not used(open).
53	RELAY	O	Mechanism deck head switch control output. "L": Relay on.
54		O	Not used(open).

Pin No.	Pin Name	I/O	Description
55	B/C	O	Dolby B/C control output. "L": Dolby C, "H": Dolby B.
56	ON/OFF	O	Dolby ON/OFF control output. "C": ON, "H": OFF
57	REC/PB	O	Dolby amplifier REC/PB control output. "L": REC, "H": PB.
58	PB70 $\mu$ s	O	Playback equalizer characteristic switch output. "H": Normal, "L": CrO2 or Metal.
59	AMS IN	O	Signal input from the AMS amplifier(IC304). With music: "H", No music: "L".
60	AMS/BS	O	Not used.
61	PASS	O	Not used(connect to 62 pin).
62	L MUTE	O	Line mute control output. "H": MUTE.
63	AVcc	O	Power supply terminal(+5.6 V).
64	Vcc	O	Power supply terminal(+5.6 V).

## \*1 Test mode

When the power is on and pin ④ is set to "L"(CNP703 is shortened.), the set enters the electrical adjustment test mode and the followings can be available.

## (2) Recording memory

Recording memory is set to ON when the tape counter is reset at the record start point.

## (1) Source monitor

Recording signals can be monitored through the LINE OUT terminal(see page 7) because the line short is removed in recording.

## IC701 mechanism controller M50747-B83SP

The mechanism deck is controlled by receiving data from IC702 (system controller).

Pin No.	Pin Name	I/O	Description
1	Vcc	—	Power supply terminal(+5.6 V).
2	BCTRQ	O	Assist motor torque control output. { "H": Large torque "L": Small torque
3	SPEED	O	Not used(open).
4	TYPE 1	O	REC EQ select output. NORMAL tape: "H"
5	TYPE 2	O	REC EQ select output. CrO2 tape: "H"
6~9		O	Not used.
10	REVTAB	I	REC switch(reverse:S1009)input. "H": When REC claw is broken.
11	70 $\mu$ s	I	70 $\mu$ s switch(S1008)input. "H": 70 $\mu$ s, "L": 120 $\mu$ s(time constant of playback EQ).
12	METAL	I	METAL switch(S1007)input. "H": METAL tape, "L": NORMAL or CrO2 tape.
13	HALF	I	HALF switch(S1006)input. "L": When a tape is mounted.
14	S REEL	I	Supply reel base sensor(IC1001)input.
15	T REEL	I	Take-up reel base sensor(IC1002)input.
16,17		I	Not used(GND).
18		—	Not used(open).
19	SCLK	I	Data transmission clock input from IC702.
20	SO	O	Serial data output to IC702.
21	SI	I	Serial data input from IC702.
22	REQ	O	Data request output to IC702.
23~25		—	Not used(open).
26	INT	I	Not used(+5.6 V).
27	CN Vss	—	Power supply terminal(GND).
28	RES	I	Reset input. "L": Reset.
29	XIN	I	Clock input(4 MHz).
30	XOUT	O	Clock output.
31	$\phi$		Not used.
32	Vss	—	Power supply terminal(GND).
33~50			Not used.

Pin No.	Pin Name	I/O	Description
51	ASSIST1	O	Head base is "H" when turned to the FWD direction. ) *1
52	ASSIST2	O	
53	REEL 1	O	Reel motor rotation control output. Reverse: "H" ) *2
54	REEL 2	O	
55	TQ1	O	Reel motor torque control output. PLAY: "H" ) *3
56	TQ2	O	
57~60	CAM1-4	I	Rotary encoder input to detect the position of the head base of the mechanical block. *4
61	OPEN	I	OPEN switch(S1004) input. "L": When the cassette holder completely opens.
62	CLOSE	I	CLOSE switch(S1003) input. "L": When the cassette holder completely closed.
63	DOOR	I	DOOR switch(S1002) input. "L": When the cassette holder is driven from open to close state.
64	FWDTAB	I	REC switch (forward : S1005) input. "H" : When REC claw is broken.

\*1

	STOP	Turn to FWD direction	Turn to RVS direction	STOP
ASSIST 1	L	H	L	H
ASSIST 2	L	L	H	H

\*2

	STOP	FWD/CLOSE	REV/OPEN	BRAKE
REEL 1	L	L	H	H
REEL 2	L	H	L	H

\*3

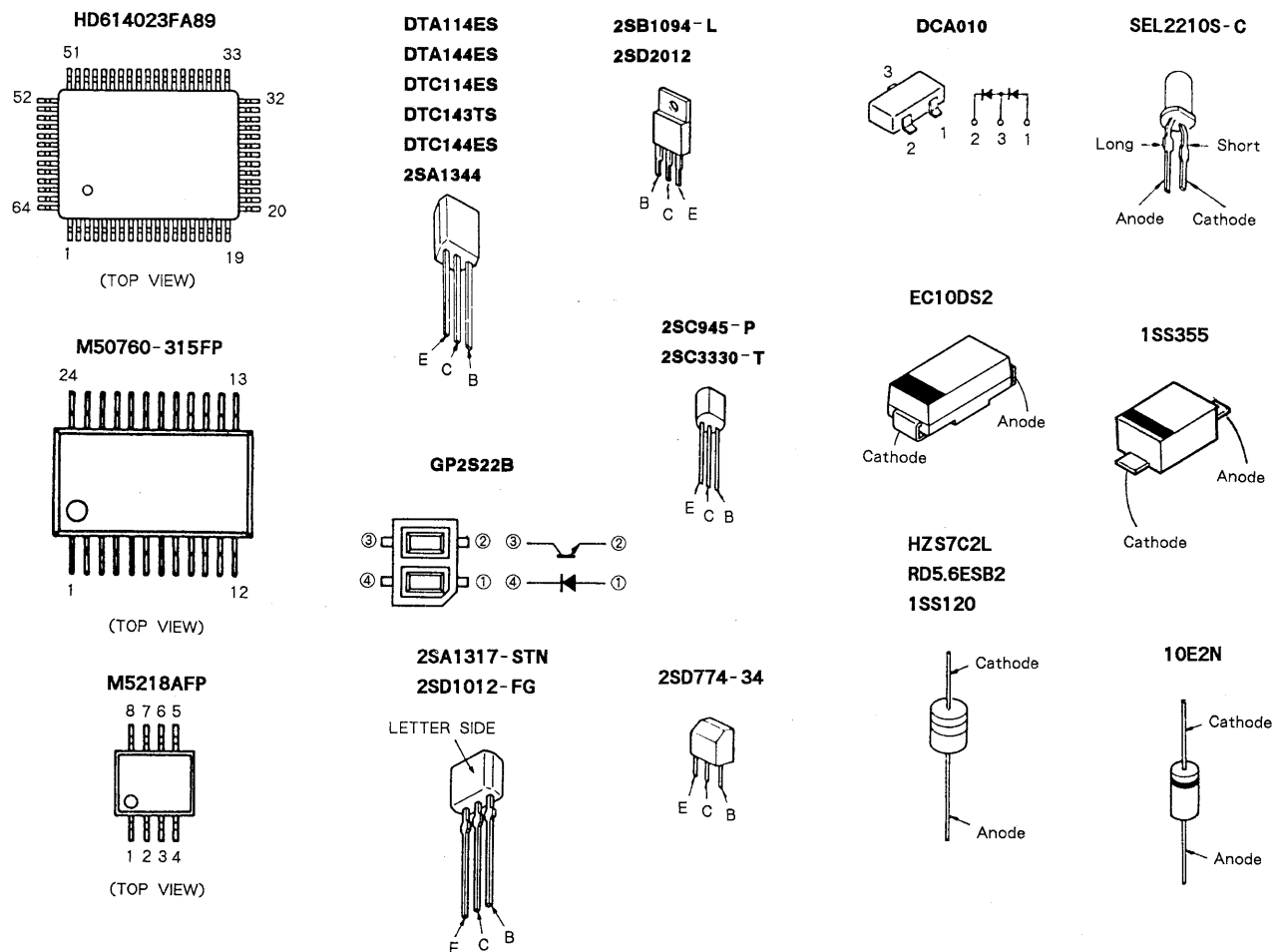
	OPEN/CLOSE (large torque)	FF/REW (medium torque)	PLAY (small torque)	INHIBIT
TQ 1	L	L	H	H
TQ 2	L	H	L	H

\*4

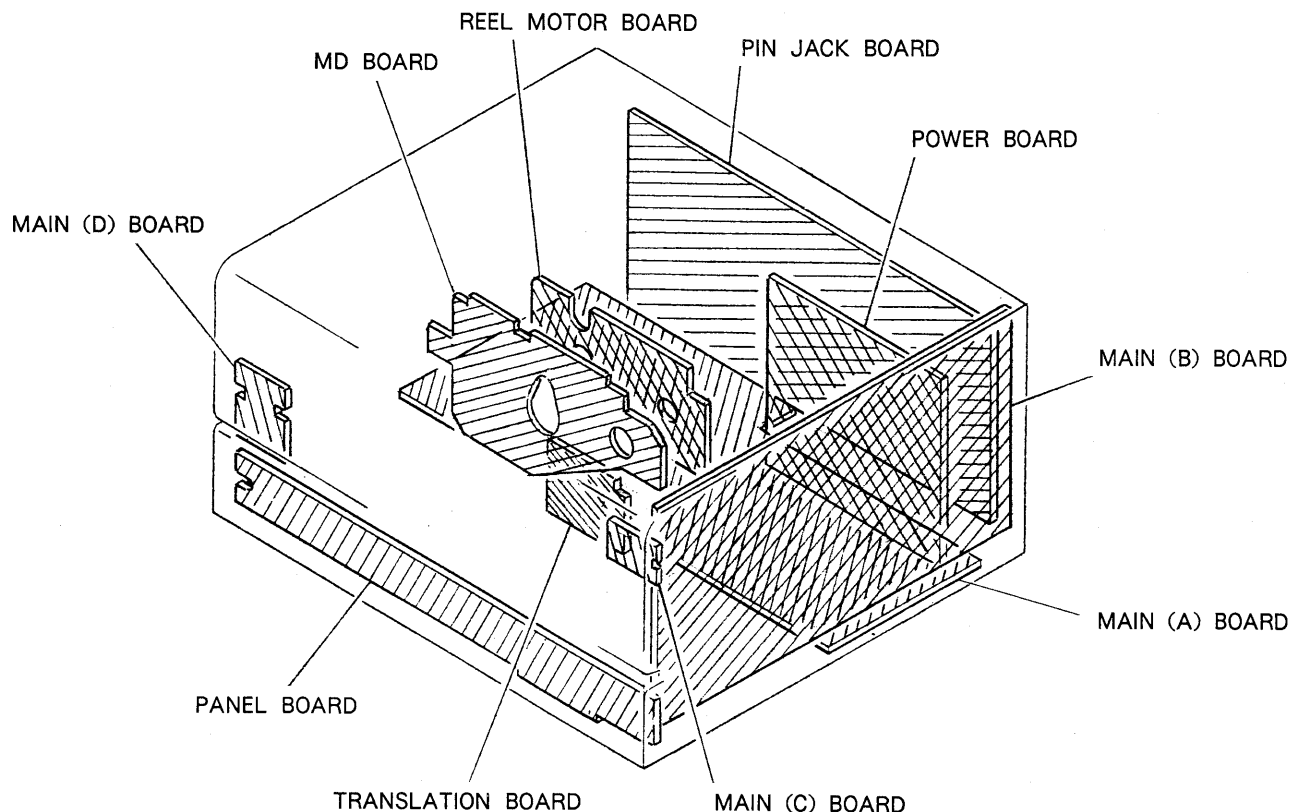
	Forward					Reverse			
	FWD PLAY	AMS/PAUSE	STOP	FF/REW	EJECT	FF/REW	STOP	AMS/PAUSE	RVS PLAY
CAM1	H	H	L	H	L	H	L	H	H
CAM2	H	L	H	H	L	H	H	L	H
CAM3	H	H	H	H	H	L	L	L	L
CAM4	H	H	H	L	L	L	H	H	H



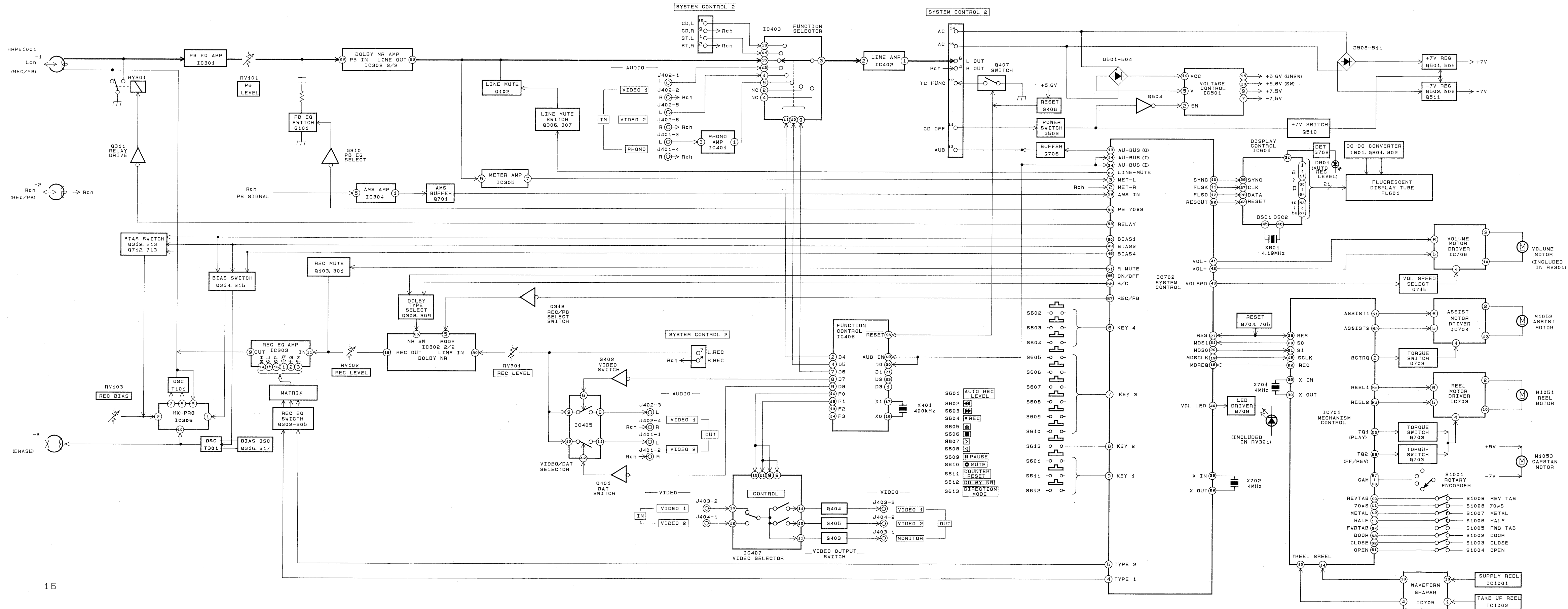
## 5-2. SEMICONDUCTOR LEAD LAYOUTS



## 5-3. CRICUIT BOARDS LOCATION

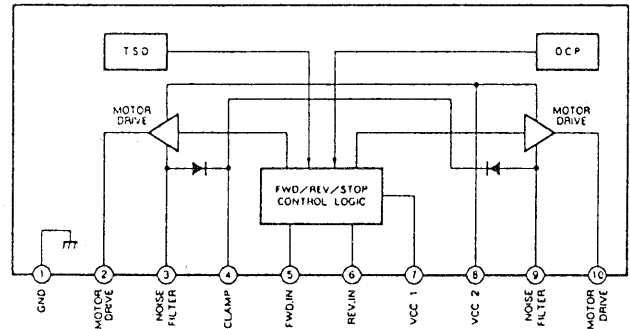


## 5-4. BLOCK DIAGRAM

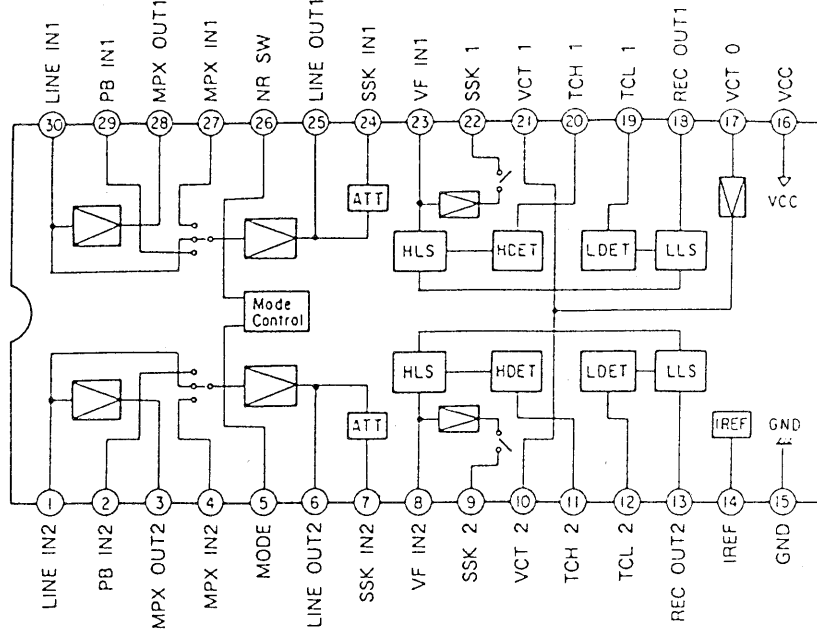


• IC BLOCK DIAGRAM

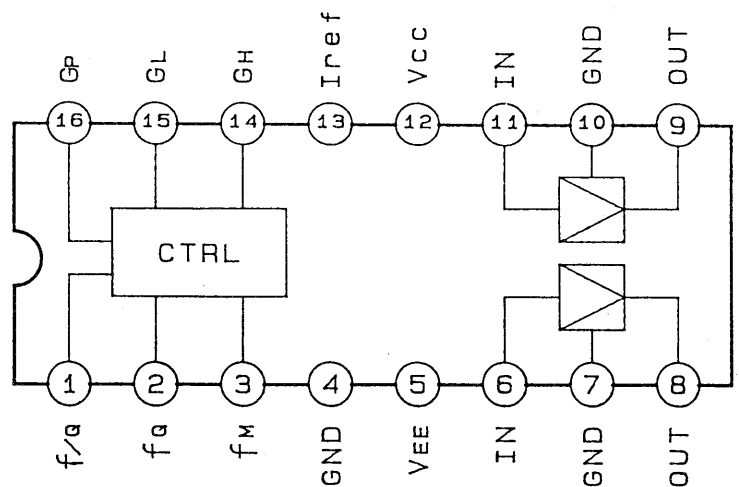
IC703,706 BA6219B  
IC704 LB1641



IC302 CXA1330S



IC303 CXA1198AP

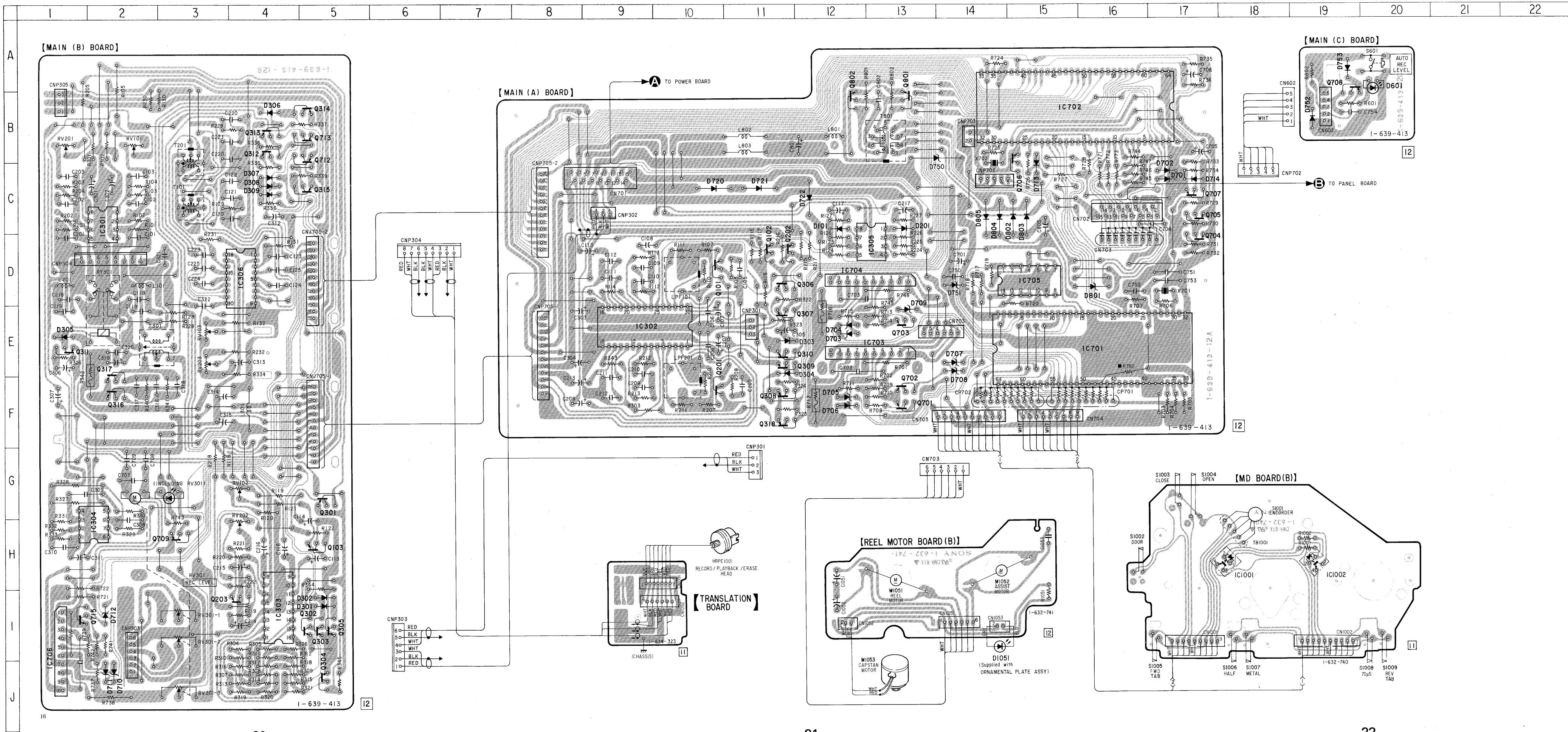


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	C-12	Q306	D-11
D201	C-13	Q307	E-11
D301	I-5	Q308	F-11
D302	I-5	Q309	E-11
D303	E-11	Q310	E-11
D304	E-11	Q311	E-1
D305	E-1	Q312	B-4
D306	B-4	Q313	B-4
D307	C-4	Q314	B-4
D308	C-4	Q315	C-5
D309	C-4	Q316	F-2
D601	A-20	Q317	E-2
D701	C-17	Q318	F-11
D702	C-17	Q701	F-13
D703	E-12	Q702	F-13
D704	E-12	Q703	F-13
D705	F-12	Q704	D-17
D706	F-12	Q705	C-17
D707	E-14	Q706	C-15
D708	E-14	Q707	C-17
D709	E-13	Q708	B-19
D710	J-2	Q709	H-3
D711	J-2	Q712	B-5
D712	I-2	Q713	B-5
D713	C-15	Q715	I-1
D714	C-17	Q801	B-13
D720	C-11	Q802	B-11
D721	C-11		
D722	C-12		
D750	B-13		
D751	D-14		
D752	B-19		
D753	A-19		
D801	D-16		
D802	C-15		
D803	C-15		
D804	C-14		
D805	C-14		
IC301	C-2		
IC302	E-9		
IC303	I-4		
IC304	H-2		
IC305	D-13		
IC306	D-4		
IC701	F-16		
IC702	C-15		
IC703	D-13		
IC704	D-13		
IC705	D-15		
IC706	I-1		
IC1001	H-18		
IC1002	H-19		
Q101	D-10		
Q102	D-11		
Q103	H-5		
Q201	F-10		
Q202	D-11		
Q203	I-4		
Q301	G-5		
Q302	I-5		
Q303	I-5		
Q304	J-5		
Q305	I-5		

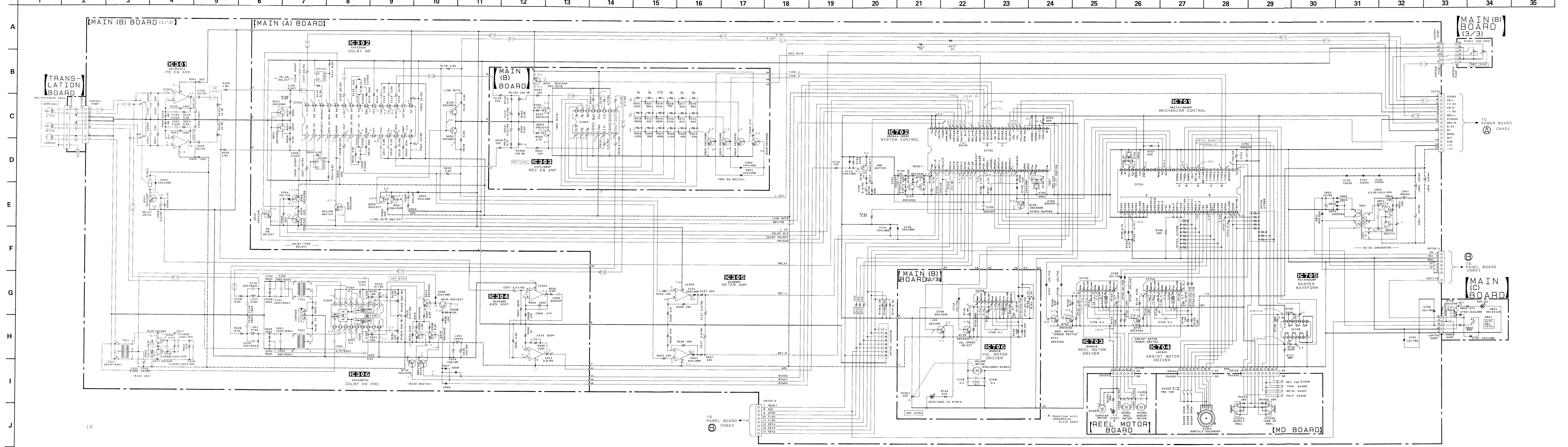
Note on Mounting Diagram:  
 • — : parts extracted from the component side.  
 • ■ : parts mounted on the conductor side.

5-5. PRINTED WIRING BOARDS - MAIN SECTION - • See page 14 for Semiconductor Lead Layouts and Circuit Boards Location.

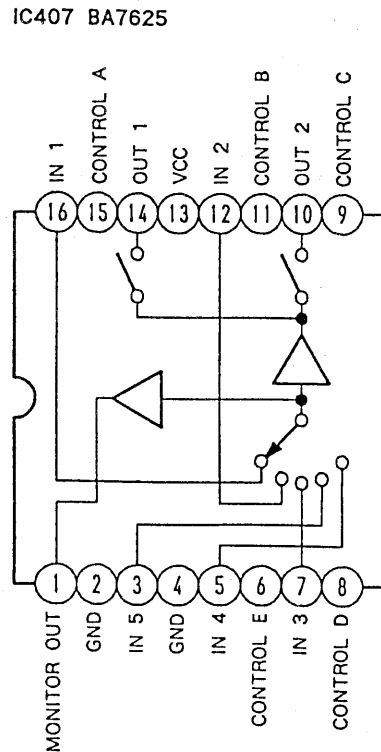
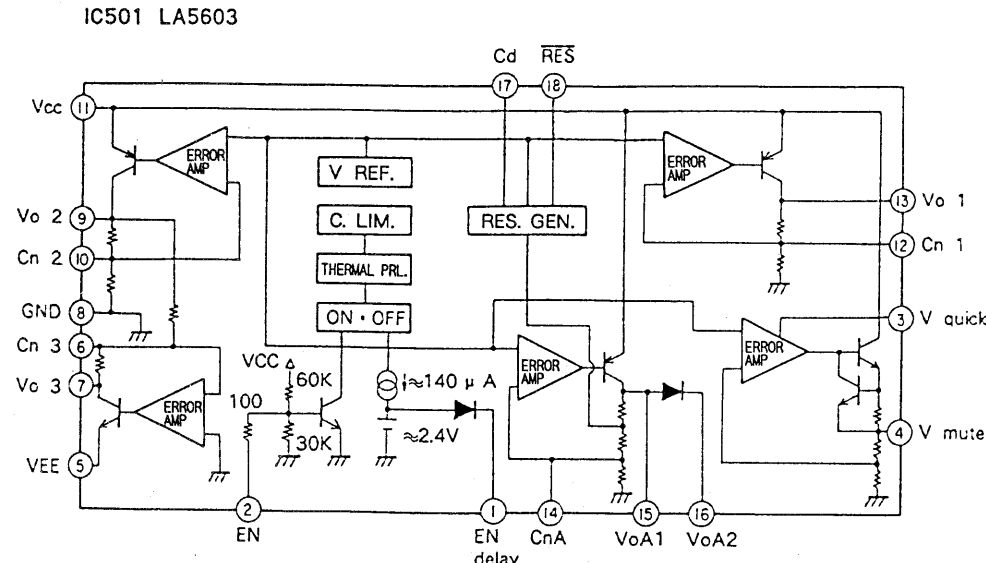




5-6. SCHEMATIC DIAGRAM - MAIN SECTION - See page 28 for Note on Schematic Diagram.



• IC BLOCK DIAGRAM



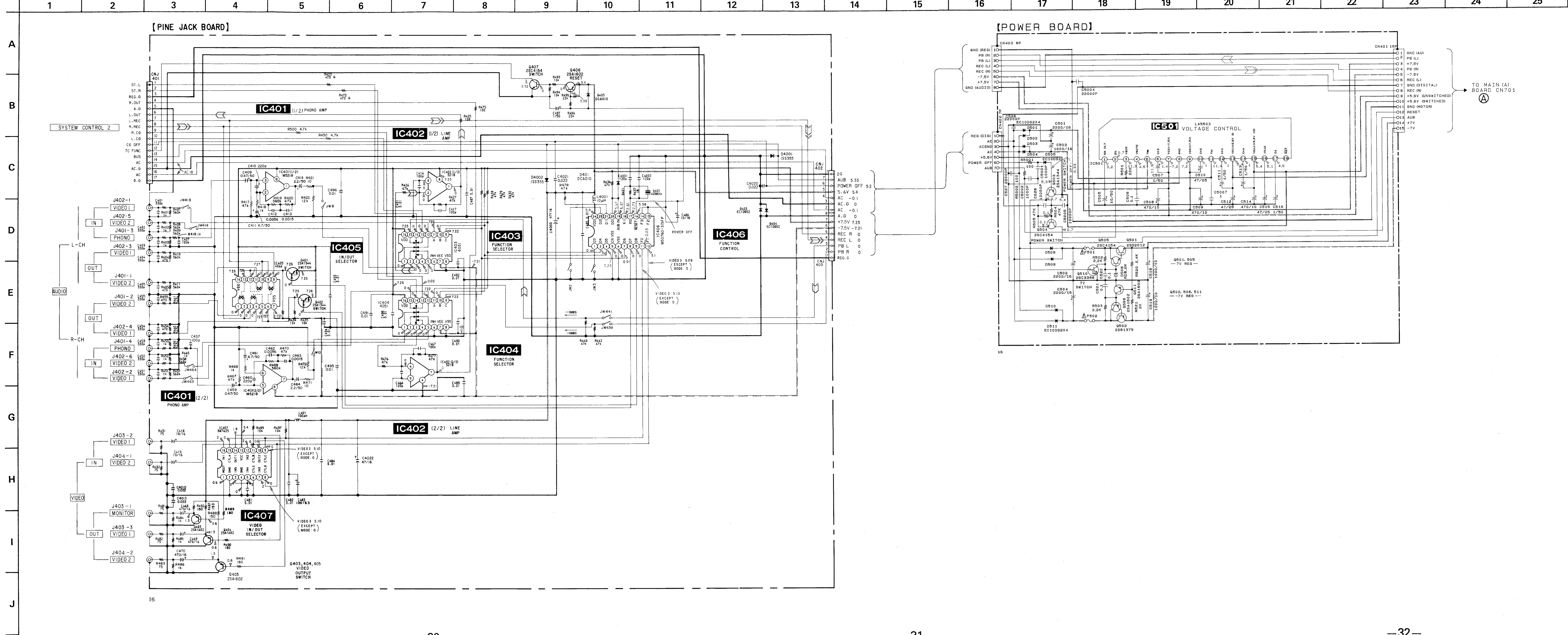
**Note on Schematic Diagram:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- : fusible resistor.

**Note:**  
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

- : B+ Line
- : B- Line
- : adjustment for repair.
- no mark : STOP
- ( ) : PB
- < : REC
- Voltages are taken with a VOM (50  $\text{k}\Omega/\text{V}$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - : PB
  - : REC

5-7. SCHEMATIC DIAGRAM - PIN JACK SECTION -



TO MAIN (A) BOARD CN701

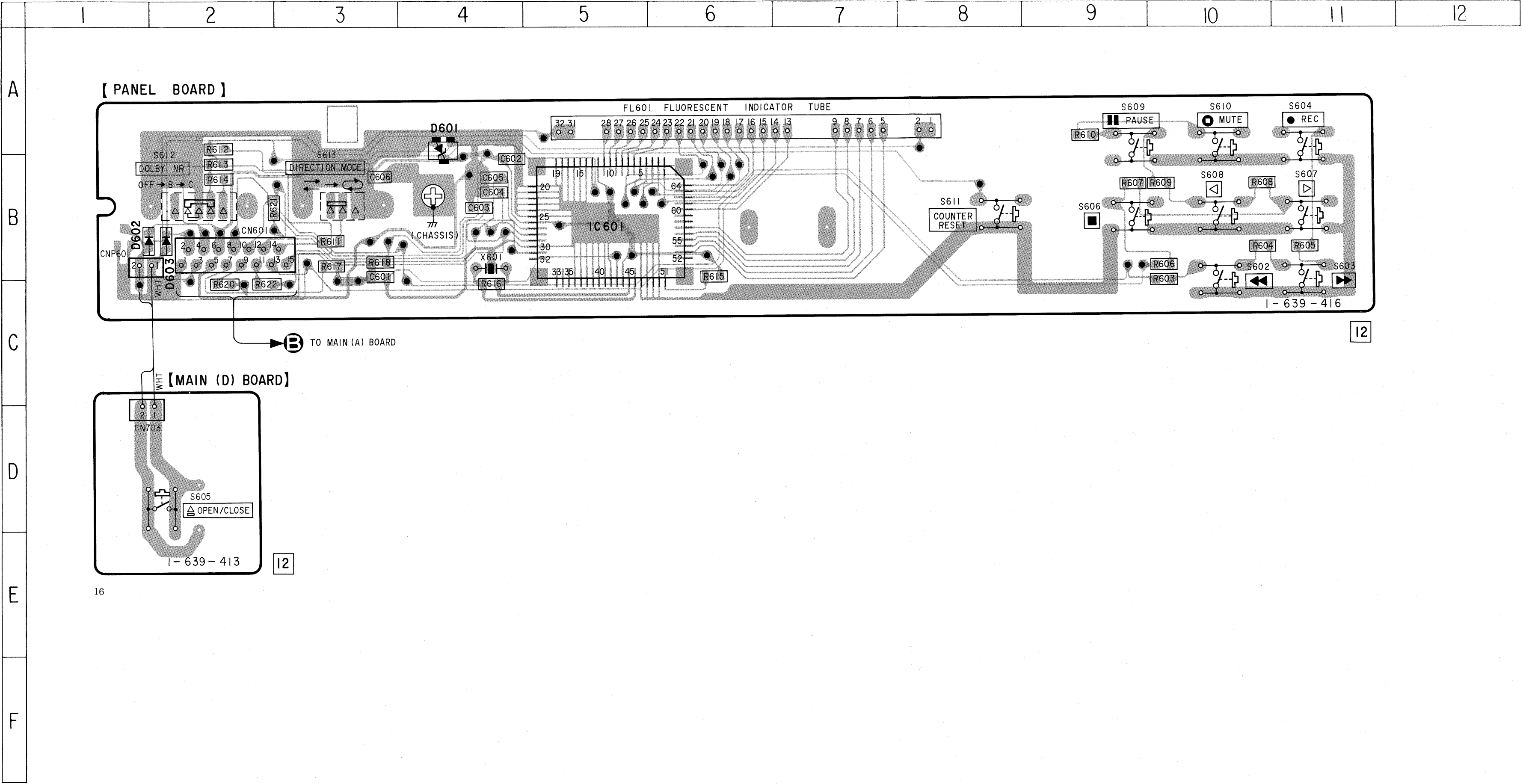




—35—

• Semiconductor Location

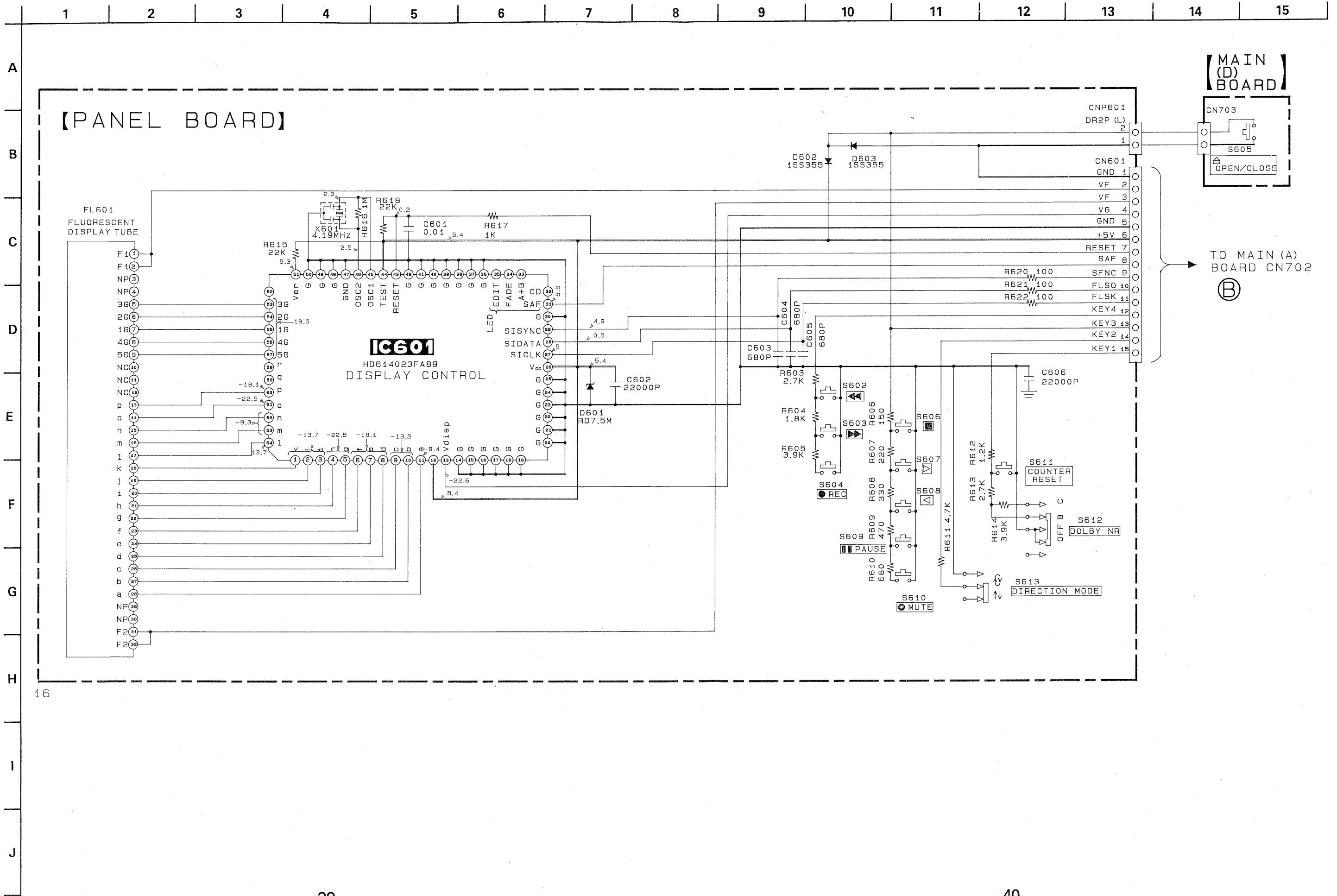
Ref. No.	Location
D601	A-4
D602	B-1
D603	B-2
IC601	B-5



Note on Mounting Diagram:

- — : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ◉ : Pattern of the rear side.

5-10. SCHEMATIC DIAGRAM - PANEL SECTION - • See page 28 for Note on Schematic Diagram.





## SECTION 6

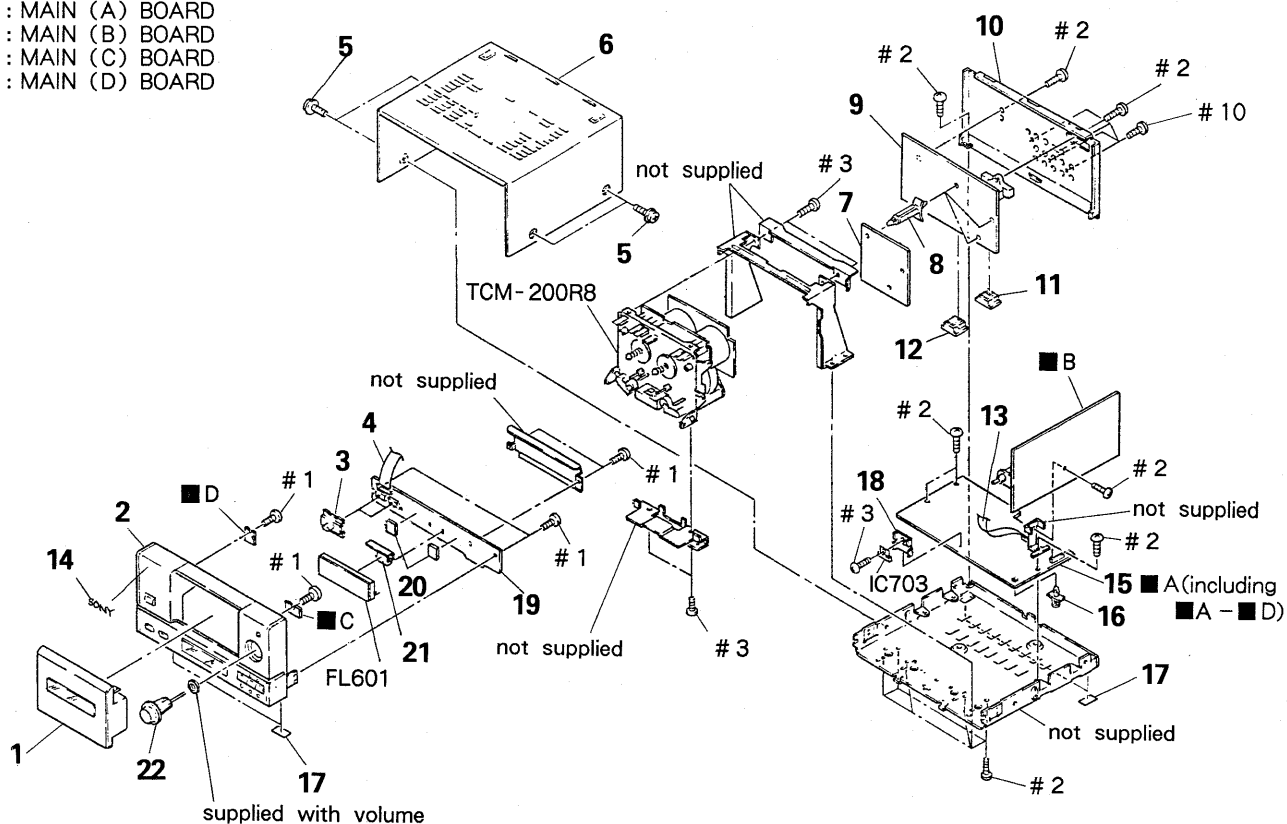
## EXPLODED VIEWS

**NOTE :**

- - XX, - X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts  
Example :  
KNOB, BALANCE (WHITE)...(RED)  
                                  ↑                                  ↑  
                                  Parts color                                  Cabinet's color
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

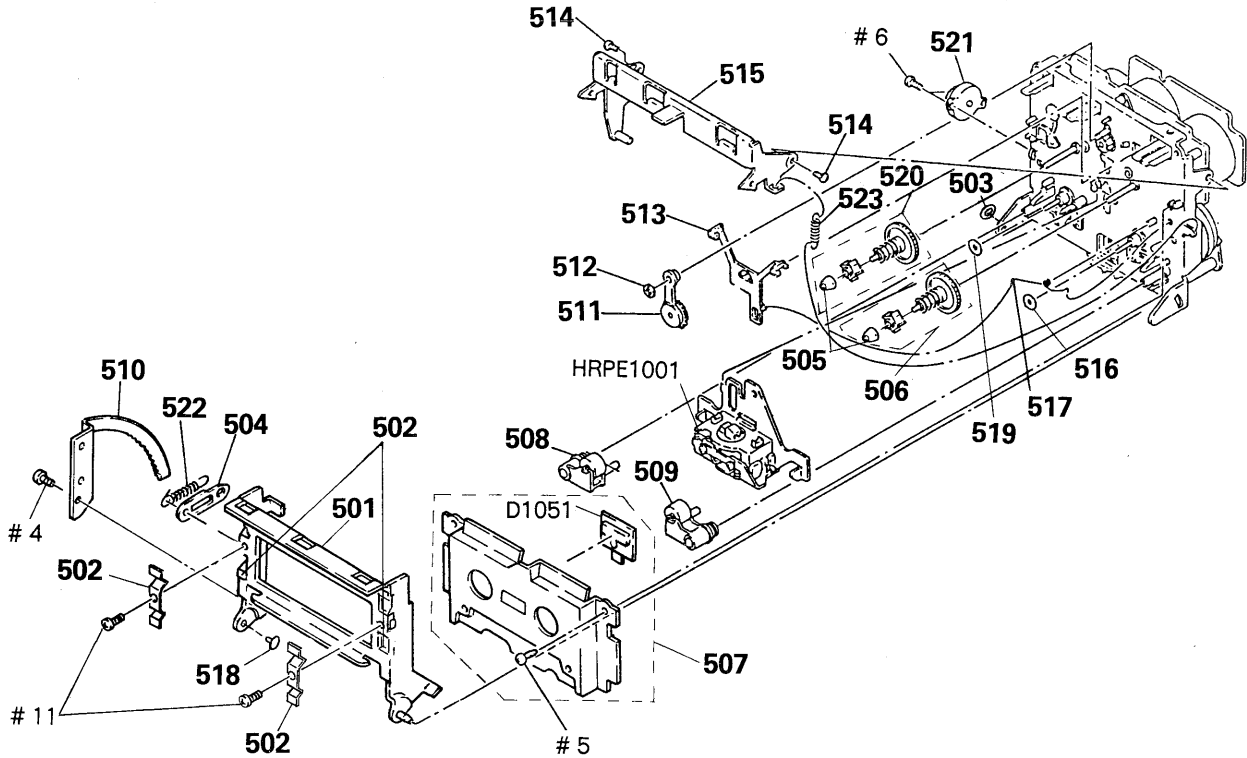
## 6-1. FRONT PANEL SECTION

- A : MAIN (A) BOARD  
 ■ B : MAIN (B) BOARD  
 ■ C : MAIN (C) BOARD  
 ■ D : MAIN (D) BOARD



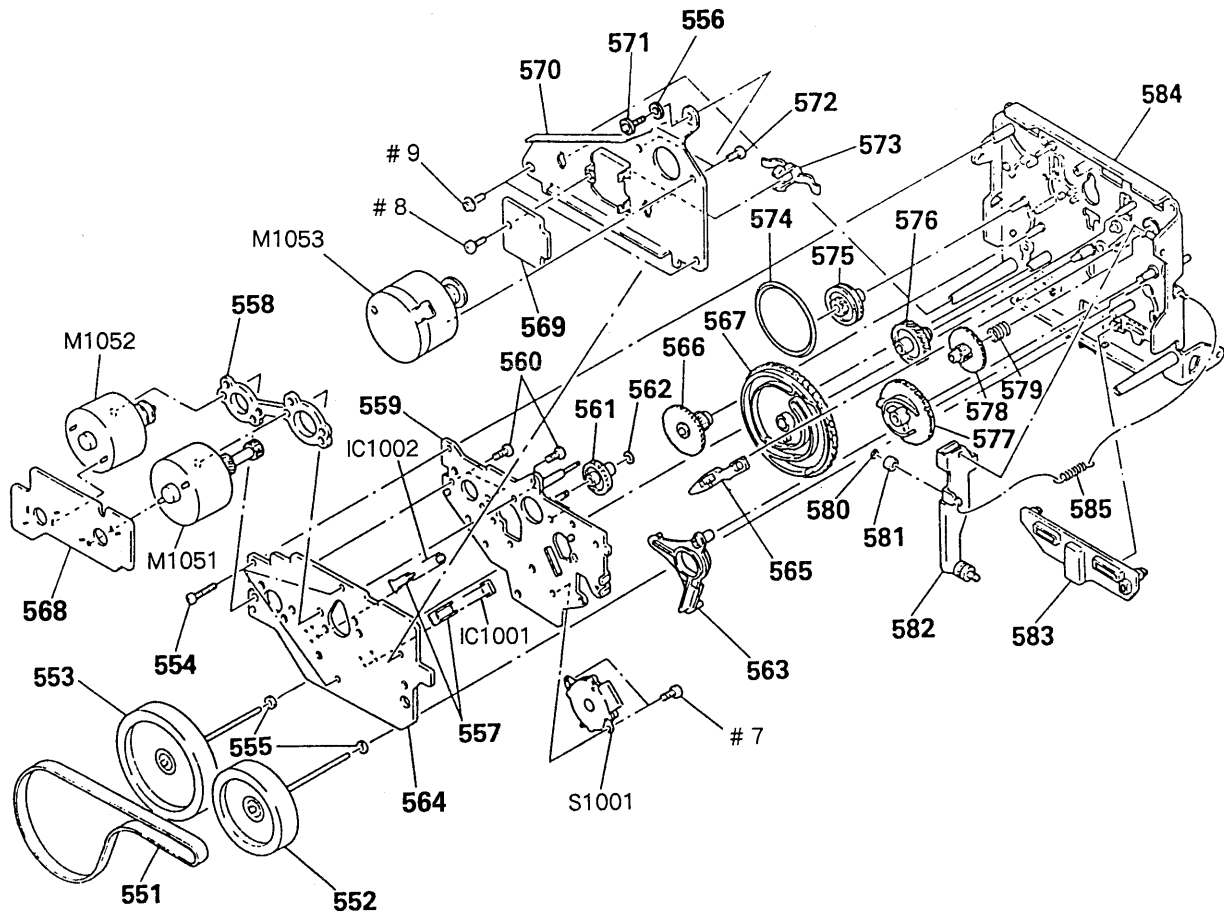
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
1	A-2003-769-A	LID ASSY, CASSETTE		13	1-575-664-11	WIRE, FLAT TYPE (15 CORE)	
2	A-2003-768-A	PANEL ASSY, FRONT		14	4-942-636-01	EMBLEM (NO. 3. 5), SONY	
3	3-368-105-01	KNOB (SLIDE)		15	* A-2006-452-A	MAIN BOARD, COMPLETE	
4	1-575-906-11	WIRE, FLAT TYPE (15 CORE)		16	* 3-350-847-31	HOLDER, PCB	
5	3-363-099-01	SCREW (CASE +3X8 TP2)		17	4-930-336-01	FOOT (FELT)	
6	4-932-841-01	CASE		18	* 3-356-925-01	HEAT SINK	
7	* 1-639-415-11	POWER BOARD		19	* A-2006-453-A	PANEL BOARD, COMPLETE	
8	* 3-703-353-02	SUPPORT, PC BOARD		20	* 4-921-941-01	CUSHION (FL)	
9	* A-2006-548-A	PIN JACK BOARD, COMPLETE		21	* 3-368-109-01	HOLDER, FL TUBE	
10	* 3-367-074-01	PANEL, BACK		22	A-2003-767-A	KNOB (REC VOL) ASSY	
11	* 1-573-188-11	CONNECTOR, BRIDGE 7P		FL601	1-519-656-11	INDICATOR TUBE, FLUORESCENT	
12	* 1-573-389-11	COONECTOR, BRIDGE 8P		IC703	8-759-973-95	IC BA6219B	

## 6-2. MECHANISM SECTION-1 (TCM-200R8)



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
501	X-3362-956-1	HOLDER ASSY, CASSETTE		514	3-356-601-11	SCREW, STEP	
502	3-354-908-01	SPRING (CASSETTE RETAINER)		515	* X-3356-608-1	LEVER (LIFTER) ASSY	
503	3-558-708-21	WASHER, STOPPER		516	3-356-713-01	WASHER	
504	* 3-356-717-01	LEVER (JOINT)		517	3-356-619-01	SPRING (B), TORSION	
505	3-362-308-01	CAP (REEL)		518	3-356-710-01	SHAFT (LEFT) (CASSETTE HOLDER)	
506	X-3356-627-1	GEAR (T) ASSY		519	3-356-714-01	WASHER	
507	X-3356-613-1	PLATE ASSY, ORNAMENTAL		520	X-3356-628-1	GEAR (S) ASSY	
508	X-3343-455-1	LEVER (PINCH F) ASSY		521	3-712-786-01	DAMPER, OIL	
509	X-3343-456-1	LEVER (PINCH R) ASSY		522	3-356-626-01	SPRING, TENSION	
510	X-3362-957-1	GEAR ASSY, LOADING		523	3-356-625-01	SPRING, TENSION	
511	X-3356-641-1	LEVER (FR2) ASSY		D1051	8-719-980-85	DIODE SLF-325C	
512	3-669-465-11	WASHER (1.5), STOPPER		HRPE1001	A-2003-772-A	BASE ASSY, HEAD	
513	3-356-614-01	SLIDER (BRAKE)					

### 6-3. MECHANISM SECTION-2 (TCM-200R8)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
551	3-356-730-01	BELT (CAPSTAN R2)		571	3-356-707-01	SCREW (+PTPWH 2X25)	
552	X-3356-642-1	FLYWHEEL (R FWD) ASSY		572	4-885-599-00	SCREW, FITTING, REINFORCEMENT	
553	X-3356-643-1	FLYWHEEL (R REV) ASSY		573	3-575-321-00	RETAINER, THRUST, CAPSTAN	
554	3-355-801-01	SCREW (BTP 2X18)		574	3-356-603-01	BELT (MODE)	
555	3-356-705-01	WASHER (CAPSTAN)		575	3-356-607-01	PULLEY (MODE)	
556	* 3-356-718-01	SPACER (THRUST RETAINER R)		576	3-356-703-01	GEAR (COMMUNICATION C)	
557	3-356-631-01	HOLDER (SENSOR)		577	3-356-616-01	GEAR (LOADING CAM)	
558	* 3-356-628-01	SPACER (MOTOR)		578	3-356-609-01	GEAR (LOADING)	
559	* X-3356-602-4	BRACKET (MOTOR RR) ASSY		579	3-356-605-01	SPRING, COMPRESSION	
560	3-363-804-01	SCREW (+P 2.6X6.5)		580	3-558-708-11	WASHER, STOPPER	
561	3-356-702-01	GEAR (COMMUNICATION B)		581	3-356-630-01	ROLLER (LOADING)	
562	3-669-465-00	WASHER (1.5), STOPPER		582	* X-3356-606-1	LEVER (LOADING) ASSY	
563	3-356-613-01	LEVER (MODE)		583	3-356-612-01	SLIDER (REVERSE)	
564	* 1-632-740-11	MD BOARD		584	X-3356-634-1	CHASSIS (R2) COMPLETE ASSY, MECH	
565	3-356-617-01	LEVER (SELECTION)		585	3-356-624-01	SPRING, TENSION	
566	3-356-606-01	GEAR (MODE)		IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
567	3-356-615-01	GEAR (MODE CAM RR)		IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
568	* 1-632-741-11	REEL MOTOR BOARD		M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
569	* 1-634-323-11	TRANSLATION BOARD		M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
570	* 3-356-629-01	BRACKET (THRUST RETAINER R)		M1053	X-3356-635-1	MOTOR (CAPSTAN R2) ASSY	
				S1001	1-466-525-11	ENCODER, ROTARY	

## MAIN

SECTION 7  
ELECTRICAL PARTS LIST

## NOTE :

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- - XX, - X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL : metal-film resistor  
METAL OXIDE : Metal Oxide-film resistor  
F : nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u :  $\mu$ , for example :  
uA... :  $\mu$ A..., uPA...,  $\mu$ PA...,  
uPB...,  $\mu$ PB..., uPC...,  $\mu$ PC...,  
uPD...,  $\mu$ PD...
- CAPACITORS :  
uF :  $\mu$ F
- COILS  
uH :  $\mu$ H

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
* A-2006-452-A	MAIN BOARD, COMPLETE	*****		C202	1-136-157-00	FILM 0.022uF 5%	50V
* 1-573-496-11	HOUSING, CONNECTOR 12P			C203	1-124-282-00	ELECT 22uF 20%	25V
* 1-573-497-11	PIN, CONNECTOR (PC BOARD) 12P			C205	1-136-158-00	FILM 0.027uF 5%	50V
* 3-356-925-01	HEAT SINK			C206	1-162-294-31	CERAMIC 0.001uF 10%	50V
7-682-547-04	SCREW +BVTT 3X6 (S)			C207	1-124-907-11	ELECT 10uF 20%	50V
	< CAPACITOR >			C208	1-126-233-11	ELECT 22uF 20%	50V
C101	1-162-294-31	CERAMIC 0.001uF 10%	50V	C209	1-130-475-00	MYLAR 0.0022uF 5%	50V
C102	1-136-157-00	FILM 0.022uF 5%	50V	C210	1-130-475-00	MYLAR 0.0022uF 5%	50V
C103	1-124-282-00	ELECT 22uF 20%	25V	C211	1-136-174-00	FILM 0.56uF 5%	50V
C105	1-136-158-00	FILM 0.027uF 5%	50V	C212	1-136-171-00	FILM 0.33uF 5%	50V
C106	1-162-294-31	CERAMIC 0.001uF 10%	50V	C213	1-124-907-11	ELECT 10uF 20%	50V
C107	1-124-907-11	ELECT 10uF 20%	50V	C214	1-124-902-00	ELECT 0.47uF 20%	50V
C108	1-126-233-11	ELECT 22uF 20%	50V	C215	1-124-927-11	ELECT 4.7uF 20%	100V
C109	1-130-475-00	MYLAR 0.0022uF 5%	50V	C216	1-124-927-11	ELECT 4.7uF 20%	100V
C110	1-130-475-00	MYLAR 0.0022uF 5%	50V	C217	1-124-925-11	ELECT 2.2uF 20%	100V
C111	1-136-174-00	FILM 0.56uF 5%	50V	C218	1-162-285-31	CERAMIC 180PF 10%	50V
C112	1-136-171-00	FILM 0.33uF 5%	50V	C219	1-136-935-11	FILM 22PF 5%	630V
C113	1-124-907-11	ELECT 10uF 20%	50V	C220	1-130-468-00	MYLAR 560PF 5%	50V
C114	1-124-902-00	ELECT 0.47uF 20%	50V	C221	1-136-433-11	FILM 100PF 5%	630V
C115	1-124-927-11	ELECT 4.7uF 20%	100V	C222	1-136-272-00	FILM 68PF 5%	630V
C116	1-124-927-11	ELECT 4.7uF 20%	100V	C223	1-136-153-00	FILM 0.01uF 5%	50V
C117	1-124-925-11	ELECT 2.2uF 20%	100V	C224	1-136-165-00	FILM 0.1uF 5%	50V
C118	1-162-285-31	CERAMIC 180PF 10%	50V	C225	1-136-157-00	FILM 0.022uF 5%	50V
C119	1-136-935-11	FILM 22PF 5%	630V	C301	1-124-443-00	ELECT 100uF 20%	10V
C120	1-130-468-00	MYLAR 560PF 5%	50V	C302	1-124-443-00	ELECT 100uF 20%	10V
C121	1-136-433-11	FILM 100PF 5%	630V	C303	1-124-907-11	ELECT 10uF 20%	50V
C122	1-136-272-00	FILM 68PF 5%	630V	C304	1-124-907-11	ELECT 10uF 20%	50V
C123	1-136-153-00	FILM 0.01uF 5%	50V	C305	1-124-478-11	ELECT 100uF 20%	25V
C124	1-136-165-00	FILM 0.1uF 5%	50V	C306	1-124-925-11	ELECT 2.2uF 20%	100V
C125	1-136-157-00	FILM 0.022uF 5%	50V	C307	1-124-902-00	ELECT 0.47uF 20%	50V
C201	1-162-294-31	CERAMIC 0.001uF 10%	50V	C308	1-162-215-31	CERAMIC 47PF 5%	50V
				C309	1-161-494-00	CERAMIC 0.022uF	25V
				C310	1-162-286-31	CERAMIC 220PF 10%	50V
				C311	1-124-925-11	ELECT 2.2uF 20%	100V
				C312	1-124-477-11	ELECT 47uF 20%	25V

Ref. No.	Part No.	Description	Remarks
C313	1-124-902-00	ELECT 0.47uF 20% 50V	
C314	1-124-478-11	ELECT 100uF 20% 25V	
C315	1-124-478-11	ELECT 100uF 20% 25V	
C316	1-130-856-00	FILM 0.0068uF 5% 100V	
C317	1-136-230-00	FILM 0.0022uF 5% 100V	
C318	1-136-230-00	FILM 0.0022uF 5% 100V	
C319	1-124-907-11	ELECT 10uF 20% 50V	
C320	1-161-494-00	CERAMIC 0.022uF 5% 25V	
C321	1-136-558-11	FILM 0.0039uF 5% 630V	
C322	1-107-046-00	MICA 4.7PF 500V	
C701	1-124-443-00	ELECT 100uF 20% 10V	
C702	1-164-159-11	CERAMIC 0.1uF 50V	
C703	1-164-159-11	CERAMIC 0.1uF 50V	
C704	1-164-159-11	CERAMIC 0.1uF 50V	
C705	1-124-443-00	ELECT 100uF 20% 10V	
C706	1-124-925-11	ELECT 2.2uF 20% 100V	
C707	1-164-159-11	CERAMIC 0.1uF 50V	
C708	1-136-165-00	FILM 0.1uF 5% 50V	
C709	1-136-165-00	FILM 0.1uF 5% 50V	
C720	1-164-159-11	CERAMIC 0.1uF 50V	
C750	1-161-494-00	CERAMIC 0.022uF 25V	
C751	1-161-494-00	CERAMIC 0.022uF 25V	
C752	1-161-494-00	CERAMIC 0.022uF 25V	
C753	1-161-494-00	CERAMIC 0.022uF 25V	
C754	1-161-494-00	CERAMIC 0.022uF 25V	
C801	1-124-907-11	ELECT 10uF 20% 50V	
C802	1-136-594-11	FILM 0.018uF 5% 100V	
C803	1-124-907-11	ELECT 10uF 20% 50V	
< CONNECTOR >			
CN701	* 1-568-834-11	SOCKET, CONNECTOR 15P	
CN702	* 1-568-834-11	SOCKET, CONNECTOR 15P	
CNP301	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP302	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP303	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CNP304	* 1-564-511-11	PLUG, CONNECTOR 8P	
CNP305	* 1-564-518-11	PLUG, CONNECTOR 3P	
CNP702	* 1-564-339-00	PIN, CONNECTOR 5P	
CNP703	* 1-564-505-11	PLUG, CONNECTOR 2P	
< COMPOSITION CIRCUIT BLOCK >			
CP701	1-233-199-11	COMPOSITION CIRCUIT BLOCK	
CP702	1-233-199-11	COMPOSITION CIRCUIT BLOCK	
CP703	1-232-944-11	COMPOSITION CIRCUIT BLOCK	



Ref. No.	Part No.	Description	Remarks
< DIODE >			
D101	8-719-912-20	DIODE 1SS120	
D201	8-719-912-20	DIODE 1SS120	
D301	8-719-912-20	DIODE 1SS120	
D302	8-719-912-20	DIODE 1SS120	
D303	8-719-912-20	DIODE 1SS120	
D304	8-719-933-50	DIODE HZS7C2L	
D305	8-719-912-20	DIODE 1SS120	
D306	8-719-912-20	DIODE 1SS120	
D307	8-719-912-20	DIODE 1SS120	
D308	8-719-912-20	DIODE 1SS120	
D309	8-719-912-20	DIODE 1SS120	
D601	8-719-301-38	DIODE SEL2210S-C(AUTO REC LEVEL)	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D703	8-719-933-50	DIODE HZS7C2L	
D704	8-719-933-50	DIODE HZS7C2L	
D705	8-719-933-50	DIODE HZS7C2L	
D706	8-719-933-50	DIODE HZS7C2L	
D707	8-719-933-50	DIODE HZS7C2L	
D708	8-719-933-50	DIODE HZS7C2L	
D709	8-719-933-50	DIODE HZS7C2L	
D710	8-719-933-50	DIODE HZS7C2L	
D711	8-719-933-50	DIODE HZS7C2L	
D712	8-719-933-50	DIODE HZS7C2L	
D713	8-719-912-20	DIODE 1SS120	
D714	8-719-912-20	DIODE 1SS120	
D720	8-719-200-77	DIODE 10E2N	
D721	8-719-200-77	DIODE 10E2N	
D722	8-719-200-77	DIODE 10E2N	
D750	8-719-933-47	DIODE HZS7B2L	
D751	8-719-933-47	DIODE HZS7B2L	
D752	8-719-912-20	DIODE 1SS120	
D753	8-719-912-20	DIODE 1SS120	
D801	8-719-109-89	DIODE RD5.6ESB2	
D802	8-719-200-77	DIODE 10E2N	
D803	8-719-200-77	DIODE 10E2N	
D804	8-719-200-77	DIODE 10E2N	
D805	8-719-200-77	DIODE 10E2N	

## MAIN

Ref. No.	Part No.	Description	Remarks
< IC >			
IC301	8-759-111-44	IC $\mu$ PC4570C-1	
IC302	8-752-036-34	IC CXA1330S	
IC303	8-752-038-02	IC CXA1198AP	
IC304	8-759-945-58	IC RC4558P	
IC305	8-759-945-58	IC RC4558P	
IC306	8-759-106-56	IC $\mu$ PC1297CA	
IC701	8-759-633-86	IC M50747-B83SP	
IC702	8-759-634-79	IC M50944-155SP	
IC703	8-759-973-95	IC BA6219B	
IC704	8-759-822-09	IC LB1641	
IC705	8-759-240-69	IC TC4069UBP	
IC706	8-759-822-09	IC LB1641	
< COIL >			
L101	1-410-780-11	INDUCTOR 27mH	
L201	1-410-780-11	INDUCTOR 27mH	
L301	1-408-080-00	INDUCTOR 100 $\mu$ H	
L801	1-410-761-11	INDUCTOR 0.68mH	
L802	1-408-575-11	INDUCTOR 100 $\mu$ H	
L803	1-408-575-11	INDUCTOR 100 $\mu$ H	
< FILTER >			
LPF101	1-236-087-11	FILTER, LOW PASS	
LPF201	1-236-087-11	FILTER, LOW PASS	
< TRANSISTOR >			
Q101	8-729-900-89	TRANSISTOR DTC144ES	
Q102	8-729-900-74	TRANSISTOR DTC143TS	
Q103	8-729-821-31	TRANSISTOR 2SD1012-FG	
Q201	8-729-900-89	TRANSISTOR DTC144ES	
Q202	8-729-900-74	TRANSISTOR DTC143TS	
Q203	8-729-821-31	TRANSISTOR 2SD1012-FG	
Q301	8-729-900-65	TRANSISTOR DTA144ES	
Q302	8-729-900-89	TRANSISTOR DTC144ES	
Q303	8-729-900-89	TRANSISTOR DTC144ES	
Q304	8-729-820-24	TRANSISTOR 2SC3330-T	
Q305	8-729-900-89	TRANSISTOR DTC144ES	
Q306	8-729-821-04	TRANSISTOR 2SA1317-STU	
Q307	8-729-900-65	TRANSISTOR DTA144ES	
Q308	8-729-900-65	TRANSISTOR DTA144ES	
Q309	8-729-900-89	TRANSISTOR DTC144ES	

Ref. No.	Part No.	Description	Remarks
Q310	8-729-900-65	TRANSISTOR DTA144ES	
Q311	8-729-900-61	TRANSISTOR DTA114ES	
Q312	8-729-900-80	TRANSISTOR DTC114ES	
Q313	8-729-900-80	TRANSISTOR DTC114ES	
Q314	8-729-900-80	TRANSISTOR DTC114ES	
Q315	8-729-821-04	TRANSISTOR 2SA1317-STU	
Q316	8-729-194-57	TRANSISTOR 2SC945-P	
Q317	8-729-194-57	TRANSISTOR 2SC945-P	
Q318	8-729-900-65	TRANSISTOR DTA144ES	
Q701	8-729-900-80	TRANSISTOR DTC114ES	
Q702	8-729-900-80	TRANSISTOR DTC114ES	
Q703	8-729-900-80	TRANSISTOR DTC114ES	
Q704	8-729-820-24	TRANSISTOR 2SC3330-T	
Q705	8-729-820-24	TRANSISTOR 2SC3330-T	
Q706	8-729-900-89	TRANSISTOR DTC144ES	
Q707	8-729-821-04	TRANSISTOR 2SA1317-STU	
Q708	8-729-900-61	TRANSISTOR DTA114ES	
Q709	8-729-900-61	TRANSISTOR DTA114ES	
Q712	8-729-900-65	TRANSISTOR DTA144ES	
Q713	8-729-900-65	TRANSISTOR DTA144ES	
Q715	8-729-900-80	TRANSISTOR DTC114ES	
Q801	8-729-140-96	TRANSISTOR 2SD774-34	
Q802	8-729-140-96	TRANSISTOR 2SD774-34	
< RESISTOR >			
R101	1-249-435-11	CARBON 33K 5% 1/4W	
R102	1-249-403-11	CARBON 68 5% 1/4W	
R103	1-247-882-11	CARBON 130K 5% 1/4W	
R104	1-249-426-11	CARBON 5.6K 5% 1/4W	
R105	1-249-420-11	CARBON 1.8K 5% 1/4W	
R107	1-247-887-00	CARBON 220K 5% 1/4W	
R108	1-247-840-00	CARBON 2.4K 5% 1/4W	
R110	1-249-423-11	CARBON 3.3K 5% 1/4W	
R111	1-249-428-11	CARBON 8.2K 5% 1/4W	
R112	1-247-864-11	CARBON 24K 5% 1/4W	
R113	1-249-414-11	CARBON 560 5% 1/4W	
R114	1-249-417-11	CARBON 1K 5% 1/4W	
R115	1-247-846-11	CARBON 4.3K 5% 1/4W	
R116	1-249-423-11	CARBON 3.3K 5% 1/4W	
R117	1-249-417-11	CARBON 1K 5% 1/4W	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R118	1-249-429-11	CARBON	10K 5% 1/4W	R304	1-249-435-11	CARBON	33K 5% 1/4W
R119	1-249-425-11	CARBON	4. 7K 5% 1/4W	R305	1-249-436-11	CARBON	39K 5% 1/4W
R120	1-249-421-11	CARBON	2. 2K 5% 1/4W	R306	1-247-880-11	CARBON	110K 5% 1/4W
R121	1-249-429-11	CARBON	10K 5% 1/4W	R307	1-247-885-00	CARBON	180K 5% 1/4W
R122	1-249-425-11	CARBON	4. 7K 5% 1/4W	R308	1-249-436-11	CARBON	39K 5% 1/4W
R124	1-249-429-11	CARBON	10K 5% 1/4W	R309	1-247-881-00	CARBON	120K 5% 1/4W
R125	1-249-437-11	CARBON	47K 5% 1/4W	R310	1-247-874-11	CARBON	62K 5% 1/4W
R126	1-249-431-11	CARBON	15K 5% 1/4W	R311	1-247-872-11	CARBON	51K 5% 1/4W
R127	1-249-409-11	CARBON	220 5% 1/4W	R312	1-247-889-00	CARBON	270K 5% 1/4W
R128	1-249-428-11	CARBON	8. 2K 5% 1/4W	R313	1-247-883-00	CARBON	150K 5% 1/4W
R129	1-247-883-00	CARBON	150K 5% 1/4W	R314	1-247-870-11	CARBON	43K 5% 1/4W
R130	1-249-393-11	CARBON	10 5% 1/4W	R315	1-247-893-11	CARBON	390K 5% 1/4W
R131	1-249-432-11	CARBON	18K 5% 1/4W	R316	1-249-438-11	CARBON	56K 5% 1/4W
R132	1-249-439-11	CARBON	10K 5% 1/4W	R317	1-247-872-11	CARBON	51K 5% 1/4W
R201	1-249-435-11	CARBON	33K 5% 1/4W	R318	1-247-876-11	CARBON	75K 5% 1/4W
R202	1-249-403-11	CARBON	68 5% 1/4W	R319	1-249-441-11	CARBON	100K 5% 1/4W
R203	1-247-882-11	CARBON	130K 5% 1/4W	R320	1-249-438-11	CARBON	56K 5% 1/4W
R204	1-249-426-11	CARBON	5. 6K 5% 1/4W	R321	1-247-881-00	CARBON	120K 5% 1/4W
R205	1-249-420-11	CARBON	1. 8K 5% 1/4W	R322	1-249-433-11	CARBON	22K 5% 1/4W
R207	1-247-887-00	CARBON	220K 5% 1/4W	R323	1-249-409-11	CARBON	220 5% 1/4W
R208	1-247-840-00	CARBON	2. 4K 5% 1/4W	R324	1-249-433-11	CARBON	22K 5% 1/4W
R210	1-249-423-11	CARBON	3. 3K 5% 1/4W	R325	1-249-433-11	CARBON	22K 5% 1/4W
R211	1-249-428-11	CARBON	8. 2K 5% 1/4W	R326	1-249-425-11	CARBON	4. 7K 5% 1/4W
R212	1-247-864-11	CARBON	24K 5% 1/4W	R327	1-247-887-00	CARBON	220K 5% 1/4W
R213	1-249-414-11	CARBON	560 5% 1/4W	R328	1-249-429-11	CARBON	10K 5% 1/4W
R215	1-247-846-11	CARBON	4. 3K 5% 1/4W	R329	1-249-441-11	CARBON	100K 5% 1/4W
R216	1-249-423-11	CARBON	3. 3K 5% 1/4W	R330	1-249-428-11	CARBON	8. 2K 5% 1/4W
R217	1-249-417-11	CARBON	1K 5% 1/4W	R331	1-249-423-11	CARBON	3. 3K 5% 1/4W
R218	1-249-429-11	CARBON	10K 5% 1/4W	R332	1-249-417-11	CARBON	1K 5% 1/4W
R219	1-249-425-11	CARBON	4. 7K 5% 1/4W	R333	1-249-441-11	CARBON	100K 5% 1/4W
R220	1-249-421-11	CARBON	2. 2K 5% 1/4W	R334	1-249-441-11	CARBON	100K 5% 1/4W
R221	1-249-429-11	CARBON	10K 5% 1/4W	R335	1-249-419-11	CARBON	1. 5K 5% 1/4W
R222	1-249-425-11	CARBON	4. 7K 5% 1/4W	R336	1-247-850-11	CARBON	6. 2K 5% 1/4W
R224	1-249-429-11	CARBON	10K 5% 1/4W	R337	1-249-421-11	CARBON	2. 2K 5% 1/4W
R225	1-249-437-11	CARBON	47K 5% 1/4W	R338	1-249-429-11	CARBON	10K 5% 1/4W
R226	1-249-431-11	CARBON	15K 5% 1/4W	R339	1-249-429-11	CARBON	10K 5% 1/4W
R227	1-249-409-11	CARBON	220 5% 1/4W	R340	1-249-437-11	CARBON	47K 5% 1/4W
R228	1-249-428-11	CARBON	8. 2K 5% 1/4W	R341	1-249-437-11	CARBON	47K 5% 1/4W
R229	1-247-883-00	CARBON	150K 5% 1/4W	R342	△1-212-851-00	FUSIBLE	5. 6 5% 1/4W F
R230	1-249-393-11	CARBON	10 5% 1/4W	R343	1-215-455-00	METAL	27K 1% 1/6W
R231	1-247-432-11	CARBON	18K 5% 1/4W	R344	1-247-864-11	CARBON	24K 5% 1/4W
R232	1-249-439-11	CARBON	10K 5% 1/4W	R345	1-249-437-11	CARBON	47K 5% 1/4W
R301	1-249-409-11	CARBON	220 5% 1/4W	R601	1-249-410-11	CARBON	270 5% 1/4W
R302	1-249-409-11	CARBON	220 5% 1/4W	R602	1-249-415-11	CARBON	680 5% 1/4W
R303	1-249-433-11	CARBON	22K 5% 1/4W	R701	1-249-429-11	CARBON	10K 5% 1/4W

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

MAIN	MD
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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R702	1-249-429-11	CARBON 10K 5% 1/4W		R748	1-249-429-11	CARBON 10K 5% 1/4W	
R703	1-249-425-11	CARBON 4.7K 5% 1/4W		R749	1-249-429-11	CARBON 10K 5% 1/4W	
R704	1-249-425-11	CARBON 4.7K 5% 1/4W		R771	1-249-405-11	CARBON 100 5% 1/4W	
R705	1-249-425-11	CARBON 4.7K 5% 1/4W		R772	1-249-405-11	CARBON 100 5% 1/4W	
R706	1-247-903-00	CARBON 1M 5% 1/4W		R773	1-249-405-11	CARBON 100 5% 1/4W	
R707	1-249-433-11	CARBON 22K 5% 1/4W		R780	1-249-433-11	CARBON 22K 5% 1/4W	
R708	1-249-411-11	CARBON 330 5% 1/4W		R801	1-249-431-11	CARBON 15K 5% 1/4W	
R709	1-247-830-11	CARBON 910 5% 1/4W		R802	1-249-431-11	CARBON 15K 5% 1/4W	
R710	1-249-418-11	CARBON 1.2K 5% 1/4W				< VARIABLE RESISTOR >	
R711	1-249-417-11	CARBON 1K 5% 1/4W		RV101	1-238-597-11	RES, ADJ, CARBON 1K	
R712	△1-212-950-00	FUSIBLE 4.7 5% 1/2W F		RV102	1-238-600-11	RES, ADJ, CARBON 10K	
R713	1-249-421-11	CARBON 2.2K 5% 1/4W		RV103	1-238-601-11	RES, ADJ, CARBON 22K	
R714	1-249-419-11	CARBON 1.5K 5% 1/4W		RV201	1-238-597-11	RES, ADJ, CARBON 1K	
R715	1-249-417-11	CARBON 1K 5% 1/4W		RV202	1-238-600-11	RES, ADJ, CARBON 10K	
R716	△1-212-950-00	FUSIBLE 4.7 5% 1/2W F		RV203	1-238-601-11	RES, ADJ, CARBON 22K	
R717	1-249-436-11	CARBON 39K 5% 1/4W		RV301	1-241-232-11	RES, VAR, CARBON 20K/20K/20K (REC LEVEL)	
R718	1-249-436-11	CARBON 39K 5% 1/4W				< RELAY >	
R719	1-247-887-00	CARBON 220K 5% 1/4W		RY301	1-515-726-11	RELAY	
R720	1-247-887-00	CARBON 220K 5% 1/4W				< SWITCH >	
R721	1-249-425-11	CARBON 4.7K 5% 1/4W		S601	1-554-303-21	SWITCH, TACTILE (AUTO REC LEVEL)	
R722	1-249-425-11	CARBON 4.7K 5% 1/4W		S605	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)	
R724	1-249-433-11	CARBON 22K 5% 1/4W				< TRANSFORMER >	
R725	1-247-903-00	CARBON 1M 5% 1/4W		T101	1-433-335-11	TRANSFORMER, BIAS OSCILLATION	
R726	1-249-429-11	CARBON 10K 5% 1/4W		T201	1-433-335-11	TRANSFORMER, BIAS OSCILLATION	
R727	1-249-425-11	CARBON 4.7K 5% 1/4W		T301	1-433-336-11	TRANSFORMER, BIAS OSCILLATION	
R728	1-249-425-11	CARBON 4.7K 5% 1/4W		T801	1-450-673-11	TRANSFORMER, DC-DC CONVERTER	
R729	1-249-425-11	CARBON 4.7K 5% 1/4W				< CRYSTAL >	
R730	1-249-433-11	CARBON 22K 5% 1/4W		X701	1-577-358-21	VIBRATOR, CERAMIC 4MHz	
R731	1-249-433-11	CARBON 22K 5% 1/4W		X702	1-577-358-21	VIBRATOR, CERAMIC 4MHz	
R732	1-249-424-11	CARBON 3.9K 5% 1/4W				*****	
R733	1-249-429-11	CARBON 10K 5% 1/4W				* 1-632-740-11 MD BOARD	
R734	1-249-441-11	CARBON 100K 5% 1/4W				*****	
R735	1-249-439-11	CARBON 68K 5% 1/4W				3-356-631-01 HOLDER (SENSOR)	
R736	1-249-417-11	CARBON 1K 5% 1/4W				< CONNECTOR >	
R737	1-249-417-11	CARBON 1K 5% 1/4W		CN1001	1-506-615-11	PIN, CONNECTOR 9P	
R738	△1-212-950-00	FUSIBLE 4.7 5% 1/2W F		CN1002 *	1-564-502-11	PIN, CONNECTOR 10P	
R739	1-249-429-11	CARBON 10K 5% 1/4W					
R740	1-249-429-11	CARBON 10K 5% 1/4W					
R741	1-249-415-11	CARBON 680 5% 1/4W					
R742	1-249-420-11	CARBON 1.8K 5% 1/4W					
R743	1-249-410-11	CARBON 270 5% 1/4W					
R744	1-249-421-11	CARBON 2.2K 5% 1/4W					
R745	1-249-421-11	CARBON 2.2K 5% 1/4W					
R746	1-249-421-11	CARBON 2.2K 5% 1/4W					
R747	1-249-421-11	CARBON 2.2K 5% 1/4W					

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.



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PANEL

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
TB1001 *	1-569-066-11	PIN, CONNECTOR 5P		D603	8-719-988-62	DIODE 1SS355	
		< IC >				< INDICATOR >	
IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B(SUPPLY REEL)		FL601	1-519-656-11	INDICATOR TUBE, FLUORESCENT	
IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B (TAKE UP REEL)				< IC >	
		< RESISTOR >		IC601	8-759-323-62	IC HD614023FA89	
R1001	1-249-408-11	CARBON 180 5% 1/4W				< RESISTOR >	
R1002	1-249-408-11	CARBON 180 5% 1/4W		R603	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
		< SWITCH >		R604	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
S1001	1-466-526-11	ENCODER, ROTARY		R605	1-216-063-00	METAL CHIP 3.9K 5% 1/10W	
S1002	1-570-953-11	SWITCH, PUSH (1 KEY) (DOOR)		R606	1-216-029-00	METAL CHIP 150 5% 1/10W	
S1003	1-571-958-11	SWITCH, PUSH (1 KEY) (CLOSE)		R607	1-216-033-00	METAL CHIP 220 5% 1/10W	
S1004	1-572-126-11	SWITCH, PUSH (1 KEY) (OPEN)		R608	1-216-037-00	METAL CHIP 330 5% 1/10W	
S1005	1-572-125-11	SWITCH, LEAF (FWD TAB)		R609	1-216-041-00	METAL CHIP 470 5% 1/10W	
S1006	1-572-202-11	SWITCH, LEAF (HALF)		R610	1-216-045-00	METAL CHIP 680 5% 1/10W	
S1007	1-572-125-11	SWITCH, LEAF (METAL)		R611	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
S1008	1-572-125-11	SWITCH, LEAF (70uS)		R612	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
S1009	1-572-125-11	SWITCH, LEAF (REV TAB)		R613	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
*****				R614	1-216-063-00	METAL CHIP 3.9K 5% 1/10W	
* A-2006-453-A PANEL BOARD, COMPLETE				R615	1-216-081-00	METAL CHIP 22K 5% 1/10W	
*****				R616	1-216-121-00	METAL CHIP 1M 5% 1/10W	
* 3-368-109-01 HOLDER, FL TUBE				R617	1-216-049-00	METAL CHIP 1K 5% 1/10W	
* 4-921-941-01 CUSHION (FL)				R618	1-216-081-00	METAL CHIP 22K 5% 1/10W	
		< CAPACITOR >		R620	1-216-025-00	METAL CHIP 100 5% 1/10W	
C601	1-164-232-11	CERAMIC CHIP 0.01uF 50V		R621	1-216-025-00	METAL CHIP 100 5% 1/10W	
C602	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V		R622	1-216-025-00	METAL CHIP 100 5% 1/10W	
C603	1-163-137-00	CERAMIC CHIP 680P 10% 50V				< SWITCH >	
C604	1-163-137-00	CERAMIC CHIP 680P 10% 50V		S602	1-554-303-21	SWITCH, TACTILE ( << )	
C605	1-163-137-00	CERAMIC CHIP 680P 10% 50V		S603	1-554-303-21	SWITCH, TACTILE ( >> )	
C606	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V		S604	1-554-303-21	SWITCH, TACTILE ( • REC )	
		< CONNECTOR >		S606	1-554-303-21	SWITCH, TACTILE ( □ )	
CN601 *	1-568-858-11	SOCKET, CONNECTOR 15P		S607	1-554-303-21	SWITCH, TACTILE ( ▷ )	
CNP601 *	1-564-495-11	PIN, CONNECTOR 2P		S608	1-554-303-21	SWITCH, TACTILE ( < )	
		< DIODE >		S609	1-554-303-21	SWITCH, TACTILE (    PAUSE )	
D601	8-719-301-38	DIODE SEL2210-C		S610	1-554-303-21	SWITCH, TACTILE ( ● MUTE )	
D602	8-719-988-62	DIODE 1SS355		S611	1-554-303-21	SWITCH, TACTILE (COUNTER RESET)	
				S612	1-570-834-11	SWITCH, SLIDE (DOLBY NR)	
				S613	1-570-842-11	SWITCH, SLIDE (DIRECTION MODE)	
						< CRYSTAL >	
				X601	1-577-359-21	VIBRATOR, CERAMIC 4.19MHz	

## PIN JACK

Ref. No.	Part No.	Description	Remarks
*****			
	* A-2006-548-A	PIN JACK BOARD, COMPLETE	
		*****	
		< CAPACITOR >	
C401	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C402	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C403	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C404	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C405	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C407	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C409	1-124-465-00	ELECT 0.47uF 20% 50V	
C410	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
C411	1-126-163-11	ELECT 4.7uF 20% 50V	
C412	1-163-018-00	CERAMIC CHIP 0.0056uF 5% 50V	
C413	1-163-011-11	CERAMIC CHIP 0.0015uF 10% 50V	
C414	1-124-257-00	ELECT 2.2uF 20% 50V	
C416	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C417	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C418	1-126-157-11	ELECT 10uF 20% 16V	
C419	1-126-157-11	ELECT 10uF 20% 16V	
C451	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C452	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C453	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C454	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C455	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C457	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C459	1-124-465-00	ELECT 0.47uF 20% 50V	
C460	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
C461	1-126-163-11	ELECT 4.7uF 20% 50V	
C462	1-163-018-00	CERAMIC CHIP 0.0056uF 5% 50V	
C463	1-163-011-11	CERAMIC CHIP 0.0015uF 10% 50V	
C464	1-124-257-00	ELECT 2.2uF 20% 50V	
C466	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C467	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C468	1-126-012-11	ELECT 470uF 20% 16V	
C469	1-126-012-11	ELECT 470uF 20% 16V	
C470	1-126-012-11	ELECT 470uF 20% 16V	
C481	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C482	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C483	1-126-177-11	ELECT 100uF 20% 10V	
C484	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C485	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C486	1-126-157-11	ELECT 10uF 20% 16V	

Ref. No.	Part No.	Description	Remarks
C487	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C488	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C489	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C490	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C491	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C492	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C493	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C494	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C495	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C496	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C497	1-126-301-11	ELECT 1uF 20% 50V	
C4001	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
C4002	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
C4003	1-124-589-11	ELECT 47uF 20% 16V	
C4010	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C4013	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C4020	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C4021	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C4022	1-124-589-11	ELECT 47uF 20% 16V	
		< CONNECTOR >	
CN401	* 1-568-834-11	SOCKET, CONNECTOR 15P	
CNJ401	* 1-580-740-11	SOCKET, CONNECTOR 17P	
CNJ402	* 1-573-187-11	PIN, CONNECTOR (PC BOARD) 7P	
CNJ403	* 1-573-388-11	PIN, CONNECTOR (PC BOARD) 8P	
		< DIODE >	
D401	8-719-990-36	DIODE DCA010	
D403	8-719-210-33	DIODE EC10DS2	
D404	8-719-210-33	DIODE EC10DS2	
D405	8-719-990-36	DIODE DCA010	
D4001	8-719-988-62	DIODE 1SS355	
D4002	8-719-988-62	DIODE 1SS355	
		< IC >	
IC401	8-759-636-55	IC M5218AFP	
IC402	8-759-636-55	IC M5218AFP	
IC403	8-759-009-05	IC MC14051BF	
IC404	8-759-009-05	IC MC14051BF	
IC405	8-759-516-47	IC CD4066BCM	
IC406	8-759-636-35	IC M50760-315FP	
IC407	8-759-991-77	IC BA7625	

## PIN JACK

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< JACK >							
J401	1-565-304-11	JACK, PIN 4P (AUDIO)		R415	1-216-049-00	METAL CHIP 1K 5% 1/10W	
J402	* 1-569-812-11	JACK, PIN 6P (AUDIO)		R417	1-216-089-00	METAL CHIP 47K 5% 1/10W	
J403	1-565-933-11	JACK, PIN 3P (VIDEO)		R418	1-216-049-00	METAL CHIP 1K 5% 1/10W	
J404	1-573-144-11	JACK, PIN 2P (VIDEO)		R419	1-216-115-00	METAL CHIP 560K 5% 1/10W	
< JUMPER >				R420	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW2	1-216-295-00	METAL CHIP 0 5% 1/10W		R421	1-216-001-00	METAL CHIP 10 5% 1/10W	
JW3	1-216-295-00	METAL CHIP 0 5% 1/10W		R422	1-216-075-00	METAL CHIP 12K 5% 1/10W	
JW8	1-216-295-00	METAL CHIP 0 5% 1/10W		R423	1-216-041-00	METAL CHIP 470 5% 1/10W	
JW10	1-216-295-00	METAL CHIP 0 5% 1/10W		R425	1-216-025-00	METAL CHIP 100 5% 1/10W	
JW12	1-216-295-00	METAL CHIP 0 5% 1/10W		R426	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW413	1-216-295-00	METAL CHIP 0 5% 1/10W		R427	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW414	1-216-295-00	METAL CHIP 0 5% 1/10W		R428	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW439	1-216-295-00	METAL CHIP 0 5% 1/10W		R429	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW441	1-216-295-00	METAL CHIP 0 5% 1/10W		R430	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW463	1-216-295-00	METAL CHIP 0 5% 1/10W		R431	1-216-022-00	METAL CHIP 75 5% 1/10W	
JW464	1-216-295-00	METAL CHIP 0 5% 1/10W		R432	1-216-022-00	METAL CHIP 75 5% 1/10W	
< COIL >				R434	1-216-073-00	METAL CHIP 10K 5% 1/10W	
L401	1-408-789-21	INDUCTOR, CHIP 100uH		R435	1-216-073-00	METAL CHIP 10K 5% 1/10W	
L4001	1-408-777-00	INDUCTOR, CHIP 10uF		R436	1-216-089-00	METAL CHIP 47K 5% 1/10W	
< TRANSISTOR >				R437	1-216-121-00	METAL CHIP 1M 5% 1/10W	
Q401	8-729-805-65	TRANSISTOR 2SA1344		R440	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q402	8-729-805-65	TRANSISTOR 2SA1344		R442	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q403	8-729-602-36	TRANSISTOR 2SA1602-F		R450	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
Q404	8-729-602-36	TRANSISTOR 2SA1602-F		R451	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q405	8-729-602-36	TRANSISTOR 2SA1602-F		R452	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q406	8-729-602-36	TRANSISTOR 2SA1602-F		R453	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q407	8-729-602-21	TRANSISTOR 2SC4154-F		R454	1-216-041-00	METAL CHIP 470 5% 1/10W	
< RESISTOR >				R455	1-216-041-00	METAL CHIP 470 5% 1/10W	
R401	1-216-049-00	METAL CHIP 1K 5% 1/10W		R457	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R402	1-216-049-00	METAL CHIP 1K 5% 1/10W		R458	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R403	1-216-049-00	METAL CHIP 1K 5% 1/10W		R459	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R404	1-216-041-00	METAL CHIP 470 5% 1/10W		R460	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R405	1-216-041-00	METAL CHIP 470 5% 1/10W		R461	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R407	1-216-115-00	METAL CHIP 560K 5% 1/10W		R465	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R408	1-216-115-00	METAL CHIP 560K 5% 1/10W		R467	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R409	1-216-115-00	METAL CHIP 560K 5% 1/10W		R468	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R410	1-216-115-00	METAL CHIP 560K 5% 1/10W		R469	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R411	1-216-115-00	METAL CHIP 560K 5% 1/10W		R470	1-216-089-00	METAL CHIP 47K 5% 1/10W	
				R471	1-216-001-00	METAL CHIP 10 5% 1/10W	
				R472	1-216-075-00	METAL CHIP 12K 5% 1/10W	
				R473	1-216-041-00	METAL CHIP 470 5% 1/10W	
				R475	1-216-025-00	METAL CHIP 100 5% 1/10W	
				R476	1-216-089-00	METAL CHIP 47K 5% 1/10W	
				R477	1-216-089-00	METAL CHIP 47K 5% 1/10W	
				R478	1-216-089-00	METAL CHIP 47K 5% 1/10W	

PIN JACK	POWER
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Ref. No.	Part No.	Description	Remarks
R481	1-216-022-00	METAL CHIP 75 5% 1/10W	
R482	1-216-022-00	METAL CHIP 75 5% 1/10W	
R483	1-216-022-00	METAL CHIP 75 5% 1/10W	
R484	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R485	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R486	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R487	1-216-029-00	METAL CHIP 150 5% 1/10W	
R488	1-216-029-00	METAL CHIP 150 5% 1/10W	
R489	1-216-031-00	METAL CHIP 180 5% 1/10W	
R490	1-216-031-00	METAL CHIP 180 5% 1/10W	
R491	1-216-031-00	METAL CHIP 180 5% 1/10W	
R492	1-216-029-00	METAL CHIP 150 5% 1/10W	
R493	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R494	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R495	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R496	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R497	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R499	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R500	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	

&lt; CRYSTAL &gt;

X401 1-577-077-11 OSCILLATOR, CERAMIC 400KHz

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\* 1-639-415-11 POWER BOARD

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7-685-646-79 SCREW +BVTP 3X8 TYPE N-S

&lt; CAPACITOR &gt;

C501	1-124-556-11	ELECT	2200uF	20%	16V
C502	1-124-556-11	ELECT	2200uF	20%	16V
C503	1-124-360-00	ELECT	1000uF	20%	16V
C504	1-124-556-11	ELECT	2200uF	20%	16V
C505	1-126-059-11	ELECT	10uF	20%	50V
C506	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C507	1-124-903-11	ELECT	1uF	20%	50V
C508	1-124-472-11	ELECT	470uF	20%	10V
C509	1-124-472-11	ELECT	470uF	20%	10V
C510	1-124-477-11	ELECT	47uF	20%	25V
C511	1-124-903-11	ELECT	1uF	20%	50V
C512	1-124-477-11	ELECT	47uF	20%	25V
C513	1-124-903-11	ELECT	1uF	20%	50V
C514	1-124-472-11	ELECT	470uF	20%	10V
C515	1-124-477-11	ELECT	47uF	20%	25V

Ref. No.	Part No.	Description	Remarks
C516	1-124-903-11	ELECT 1uF 20% 50V	
C518	1-124-473-11	ELECT 1000uF 20% 10V	
C519	1-124-473-11	ELECT 1000uF 20% 10V	
C520	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C521	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C526	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C527	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C528	1-164-232-11	CERAMIC CHIP 0.01uF 10% 50V	
C5001	1-163-009-11	CERAMIC CHIP 1000P 10% 50V	
C5002	1-163-009-11	CERAMIC CHIP 1000P 10% 50V	
C5004	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C5005	1-164-232-11	CERAMIC CHIP 0.01uF 10% 50V	
C5007	1-164-346-11	CERAMIC CHIP 1uF 16V	

&lt; CONNECTOR &gt;

CN402 \* 1-573-187-11 PIN, CONNECTOR (PC BOARD) 7P

CN403 \* 1-573-388-11 PIN, CONNECTOR (PC BOARD) 8P

&lt; DIODE &gt;

D501	8-719-210-33	DIODE EC10DS2
D502	8-719-210-33	DIODE EC10DS2
D503	8-719-210-33	DIODE EC10DS2
D504	8-719-210-33	DIODE EC10DS2
D505	8-719-988-62	DIODE 1SS355
D506	8-719-106-36	DIODE RD8.2M-B3
D508	8-719-210-33	DIODE EC10DS2
D509	8-719-210-33	DIODE EC10DS2
D510	8-719-210-33	DIODE EC10DS2
D511	8-719-210-33	DIODE EC10DS2

&lt; FUSE &gt;

F501	△1-532-843-21	FUSE 2.5A
F502	△1-532-843-21	FUSE 2.5A

&lt; IC &gt;

IC501	8-759-823-46	IC LA5603
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&lt; TRANSISTOR &gt;

Q501	8-729-209-15	TRANSISTOR 2SD2012
Q502	8-729-111-67	TRANSISTOR 2SB1094-L
Q503	8-729-805-65	TRANSISTOR 2SA1344
Q504	8-729-602-21	TRANSISTOR 2SC4154-F
Q505	8-729-602-21	TRANSISTOR 2SC4154-F

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

## POWER

## REEL MOTOR

## TRANSLATION

Ref. No.	Part No.	Description	Remarks
Q506	8-729-602-36	TRANSISTOR 2SA1602-EF	
Q510	8-729-805-49	TRANSISTOR 2SC3398	
Q511	8-729-602-36	TRANSISTOR 2SA1602-EF	
< RESISTOR >			
R501	1-216-033-00	METAL CHIP 220 5% 1/10W	
R502	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R503	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R504	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R505	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R520	1-216-058-00	METAL CHIP 2.4K 5% 1/10W	
R521	1-216-056-00	METAL CHIP 2K 5% 1/10W	
R5001	1-216-025-00	METAL CHIP 100 5% 1/10W	
R5002	1-216-025-00	METAL CHIP 100 5% 1/10W	
*****			
* 1-632-741-11 REEL MOTOR BOARD			
*****			
< CAPACITOR >			
C1051	1-124-907-11	ELECT 10uF 20% 50V	
C1052	1-124-907-11	ELECT 10uF 20% 50V	
C1053	1-164-159-11	CERAMIC 0.1uF 50V	
< CONNECTOR >			
CN1051	* 1-564-499-11	PIN, CONNECTOR 6P	
CN1052	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN1053	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
< RESISTOR >			
R1051	1-249-414-11	CARBON 560 5% 1/4W	
*****			
* 1-634-323-11 TRANSLATION BOARD			
*****			
< CONNECTOR >			
CN1091	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN1092	* 1-564-509-11	PLUG, CONNECTOR 6P	
*****			

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	
		*****	
4	1-575-906-11	WIRE, FLAT TYPE (15 CORE)	
11	* 1-573-188-11	CONNECTOR, BRIDGE 7P	
12	* 1-573-389-11	COONECTOR, BRIDGE 8P	
13	1-575-664-11	WIRE, FLAT TYPE (15 CORE)	
D1051	8-719-980-85	DIODE SLF-325C	
HRPE1001	A-2003-772-A	BASE ASSY, HEAD	
IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
M1053	X-3356-635-1	MOTOR (CAPSTAN R2) ASSY	
S1001	1-466-525-11	ENCODER, ROTARY	

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## HARDWARE LIST

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# 1	7-621-773-93	SCREW (PANEL 2.6 TP2)
# 2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
# 3	7-682-547-04	SCREW +BVTT 3X6 (S)
# 4	7-621-283-00	SCREW +BVTT 2X5 (S)
# 5	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S
# 6	7-621-255-20	SCREW +BVTT 2X4 (S)
# 7	7-621-255-35	SCREW +BVTT 2X5 (S)
# 8	7-621-770-67	SCREW +BVTT 2.6X6 (S)
# 9	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S
#10	7-621-849-00	SCREW (BV/RING)
# 11	7-621-255-15	SCREW +PTT 2X3 (S)



# TC-H5600

## SONY<sup>®</sup> SERVICE MANUAL

*AEP Model  
UK Model  
E Model*

### SUPPLEMENT-1

File this Supplement with the Service Manual.

<b>Subject :</b> Circuit change
---------------------------------

# SECTION 6

## ELECTRICAL PARTS LIST

### MAIN

#### NOTE:

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.

- RESISTORS  
All resistors are in ohms  
METAL: Metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F : nonflammable
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$  A..., uPA...:  $\mu$  PA..., uPB...:  $\mu$  PB...,  
uPC...:  $\mu$  PC..., uPD...:  $\mu$  PD...
- CAPACITORS  
uF :  $\mu$  F
- COILS  
uH :  $\mu$  H

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	A-2006-452-A	MAIN BOARD, COMPLETE *****		C213	1-124-907-11	ELECT	10uF 20% 50V
				C214	1-124-902-00	ELECT	0. 47uF 20% 50V
*	1-573-496-11	HOUSING, CONNECTOR 12P		C215	1-124-927-11	ELECT	4. 7uF 20% 100V
*	1-573-497-11	PIN, CONNECTOR (PC BOARD) 12P BOARD		C216	1-124-927-11	ELECT	4. 7uF 20% 100V
*	3-356-925-01	HEAT SINK		C217	1-124-925-11	ELECT	2. 2uF 20% 100V
	7-682-548-04	SCREW +BVT 3X8 (S)					
		< CAPACITOR >		C218	1-162-285-31	CERAMIC	180PF 10% 50V
C101	1-162-294-31	CERAMIC	0. 001uF 10% 50V	C219	1-136-935-11	FILM	22PF 5% 630V
C102	1-136-157-00	FILM	0. 022uF 5% 50V	C220	1-130-468-00	MYLAR	560PF 5% 50V
C103	1-124-282-00	ELECT	22uF 20% 25V	C221	1-136-433-11	FILM	100PF 5% 630V
C105	1-136-158-00	FILM	0. 027uF 5% 50V	C222	1-136-272-00	FILM	68PF 5% 630V
C106	1-162-294-31	CERAMIC	0. 001uF 10% 50V				
C107	1-124-907-11	ELECT	10uF 20% 50V	C223	1-136-153-00	FILM	0. 01uF 5% 50V
C108	1-124-916-11	ELECT	22uF 20% 63V	C224	1-136-165-00	FILM	0. 1uF 5% 50V
C109	1-130-475-00	MYLAR	0. 0022uF 5% 50V	C225	1-136-157-00	FILM	0. 022uF 5% 50V
C110	1-130-475-00	MYLAR	0. 0022uF 5% 50V	C301	1-124-443-00	ELECT	100uF 20% 10V
C111	1-136-174-00	FILM	0. 56uF 5% 50V	C302	1-124-443-00	ELECT	100uF 20% 10V
C112	1-136-171-00	FILM	0. 33uF 5% 50V				
C113	1-124-907-11	ELECT	10uF 20% 50V	C303	1-124-907-11	ELECT	10uF 20% 50V
C114	1-124-902-00	ELECT	0. 47uF 20% 50V	C304	1-124-907-11	ELECT	10uF 20% 50V
C115	1-124-927-11	ELECT	4. 7uF 20% 100V	C305	1-124-478-11	ELECT	100uF 20% 25V
C116	1-124-927-11	ELECT	4. 7uF 20% 100V	C306	1-124-925-11	ELECT	2. 2uF 20% 100V
C117	1-124-925-11	ELECT	2. 2uF 20% 100V	C307	1-124-902-00	ELECT	0. 47uF 20% 50V
C118	1-162-285-31	CERAMIC	180PF 10% 50V				
C119	1-136-935-11	FILM	22PF 5% 630V	C308	1-162-215-31	CERAMIC	47PF 5% 50V
C120	1-130-468-00	MYLAR	560PF 5% 50V	C309	1-161-494-00	CERAMIC	0. 022uF 25V
C121	1-136-433-11	FILM	100PF 5% 630V	C310	1-162-286-31	CERAMIC	220PF 10% 50V
C122	1-136-272-00	FILM	68PF 5% 630V	C311	1-124-925-11	ELECT	2. 2uF 20% 100V
C123	1-136-153-00	FILM	0. 01uF 5% 50V	C312	1-124-477-11	ELECT	47uF 20% 25V
C124	1-136-165-00	FILM	0. 1uF 5% 50V				
C125	1-136-157-00	FILM	0. 022uF 5% 50V	C313	1-124-902-00	ELECT	0. 47uF 20% 50V
C201	1-162-294-31	CERAMIC	0. 001uF 10% 50V	C314	1-124-478-11	ELECT	100uF 20% 25V
C202	1-136-157-00	FILM	0. 022uF 5% 50V	C315	1-124-478-11	ELECT	100uF 20% 25V
C203	1-124-282-00	ELECT	22uF 20% 25V	C316	1-130-856-00	FILM	0. 0068uF 5% 100V
C205	1-136-158-00	FILM	0. 027uF 5% 50V	C317	1-136-230-00	FILM	0. 0022uF 5% 100V
C206	1-162-294-31	CERAMIC	0. 001uF 10% 50V				
C207	1-124-907-11	ELECT	10uF 20% 50V	C318	1-136-230-00	FILM	0. 0022uF 5% 100V
C208	1-124-916-11	ELECT	22uF 20% 63V	C319	1-124-907-11	ELECT	10uF 20% 50V
C209	1-130-475-00	MYLAR	0. 0022uF 5% 50V	C320	1-161-494-00	CERAMIC	0. 022uF 25V
C210	1-130-475-00	MYLAR	0. 0022uF 5% 50V	C321	1-136-558-11	FILM	0. 0039uF 5% 630V
C211	1-136-174-00	FILM	0. 56uF 5% 50V	C322	1-107-585-11	CERAMIC	5PF 0. 25PF 500V
C212	1-136-171-00	FILM	0. 33uF 5% 50V				
				C701	1-124-443-00	ELECT	100uF 20% 10V
				C702	1-164-159-11	CERAMIC	0. 1uF 50V
				C703	1-164-159-11	CERAMIC	0. 1uF 50V
				C704	1-164-159-11	CERAMIC	0. 1uF 50V
				C705	1-124-443-00	ELECT	100uF 20% 10V
				C706	1-124-925-11	ELECT	2. 2uF 20% 100V
				C707	1-164-159-11	CERAMIC	0. 1uF 50V
				C708	1-136-165-00	FILM	0. 1uF 5% 50V



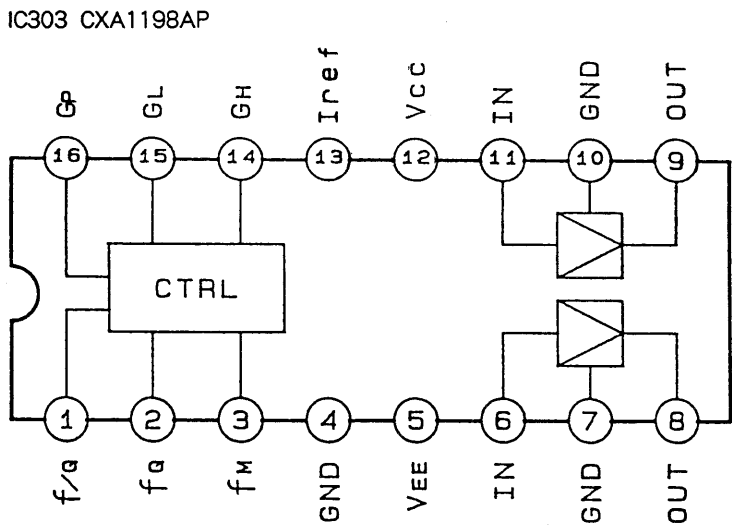
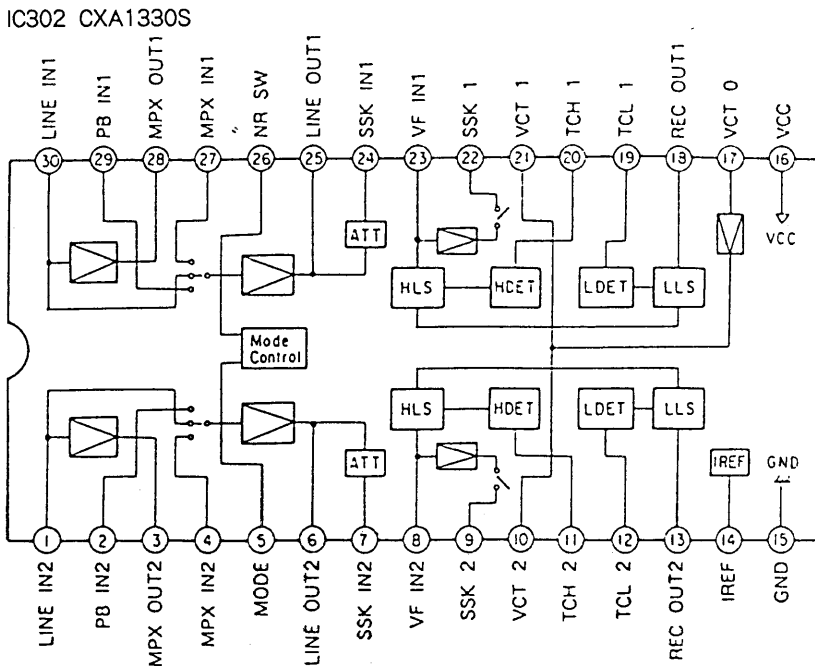
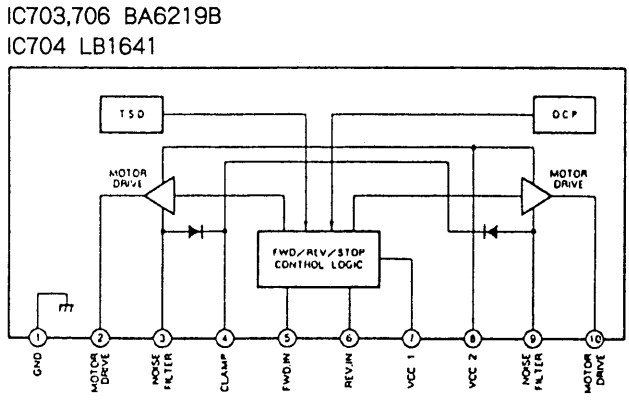
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C709	1-136-165-00	FILM	0.1uF 5%	50V	D709	8-719-933-50	DIODE HZS7C2L
C720	1-164-159-11	CERAMIC	0.1uF	50V	D710	8-719-933-50	DIODE HZS7C2L
C750	1-161-494-00	CERAMIC	0.022uF	25V	D711	8-719-933-50	DIODE HZS7C2L
C751	1-161-494-00	CERAMIC	0.022uF	25V	D712	8-719-933-50	DIODE HZS7C2L
C752	1-161-494-00	CERAMIC	0.022uF	25V	D713	8-719-987-63	DIODE 1N4148M
C753	1-161-494-00	CERAMIC	0.022uF	25V	D714	8-719-987-63	DIODE 1N4148M
C754	1-161-494-00	CERAMIC	0.022uF	25V	D720	8-719-200-77	DIODE 10E2N
C801	1-124-907-11	ELECT	10uF 20%	50V	D721	8-719-200-77	DIODE 10E2N
C802	1-136-594-11	FILM	0.018uF 5%	100V	D722	8-719-200-77	DIODE 10E2N
C803	1-124-907-11	ELECT	10uF 20%	50V	D750	8-719-933-47	DIODE HZS7B2L
< CONNECTOR >				D751	8-719-933-47	DIODE HZS7B2L	
* CN701	1-568-834-11	SOCKET, CONNECTOR 15P		D752	8-719-987-63	DIODE 1N4148M	
* CN702	1-568-834-11	SOCKET, CONNECTOR 15P		D753	8-719-987-63	DIODE 1N4148M	
* CNP301	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		D754	8-719-987-63	DIODE 1N4148M	
* CNP302	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		D801	8-719-109-89	DIODE RD5.6ESB2	
* CNP303	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P		D802	8-719-200-77	DIODE 10E2N	
CNP304	1-564-511-11	PLUG, CONNECTOR 8P		D803	8-719-200-77	DIODE 10E2N	
* CNP305	1-564-518-11	PLUG, CONNECTOR 3P		D804	8-719-200-77	DIODE 10E2N	
* CNP702	1-564-339-00	PIN, CONNECTOR 5P		D805	8-719-200-77	DIODE 10E2N	
* CNP703	1-564-505-11	PLUG, CONNECTOR 2P		< IC >			
* CNP707	1-564-342-11	PIN, CONNECTOR 8P		IC301	8-759-111-44	IC uPC4570C-1	
* CNP708	1-564-336-61	PIN, CONNECTOR 2P		IC302	8-752-059-56	IC CXA1330S	
< COMPOSITION CIRCUIT BLOCK >				IC303	8-752-060-64	IC CXA1198AP	
CP701	1-233-199-11	COMPOSITION CIRCUIT BLOCK		IC304	8-759-145-58	IC uPC4558C	
CP702	1-233-199-11	COMPOSITION CIRCUIT BLOCK		IC305	8-759-145-58	IC uPC4558C	
CP703	1-232-944-11	COMPOSITION CIRCUIT BLOCK		IC306	8-759-106-56	IC uPC1297CA	
< DIODE >				IC701	8-759-633-86	IC M50747-B83SP	
D101	8-719-987-63	DIODE 1N4148M		IC702	8-759-634-79	IC M50944-155SP	
D201	8-719-987-63	DIODE 1N4148M		IC703	8-759-973-95	IC BA6219B	
D301	8-719-987-63	DIODE 1N4148M		IC704	8-759-822-09	IC LB1641	
D302	8-719-987-63	DIODE 1N4148M		IC705	8-759-240-69	IC TC4069UBP	
D303	8-719-987-63	DIODE 1N4148M		IC706	8-759-822-09	IC LB1641	
D304	8-719-933-50	DIODE HZS7C2L		< COIL >			
D305	8-719-987-63	DIODE 1N4148M		L101	1-410-780-11	INDUCTOR 27mH	
D306	8-719-987-63	DIODE 1N4148M		L201	1-410-780-11	INDUCTOR 27mH	
D307	8-719-987-63	DIODE 1N4148M		L301	1-408-080-00	INDUCTOR 100uH	
D308	8-719-987-63	DIODE 1N4148M		L801	1-410-761-11	INDUCTOR 0.68mH	
D309	8-719-987-63	DIODE 1N4148M		L802	1-410-521-11	INDUCTOR 100uH	
D601	8-719-301-38	DIODE SEL2210S-C (AUTO REC LEVEL)		L803	1-410-521-11	INDUCTOR 100uH	
D701	8-719-987-63	DIODE 1N4148M		< FILTER >			
D702	8-719-987-63	DIODE 1N4148M		LPF101	1-236-087-11	FILTER, LOW PASS	
D703	8-719-933-50	DIODE HZS7C2L		LPF201	1-236-087-11	FILTER, LOW PASS	
D704	8-719-933-50	DIODE HZS7C2L		< TRANSISTOR >			
D705	8-719-933-50	DIODE HZS7C2L		Q101	8-729-900-89	TRANSISTOR DTC144ES	
D706	8-719-933-50	DIODE HZS7C2L		Q102	8-729-900-74	TRANSISTOR DTC143TS	
D707	8-719-933-50	DIODE HZS7C2L		Q103	8-729-821-31	TRANSISTOR 2SD1012-FG	
D708	8-719-933-50	DIODE HZS7C2L					

# MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q201	8-729-900-89	TRANSISTOR	DTC144ES	R115	1-249-421-11	CARBON	2.2K 5% 1/4W F
Q202	8-729-900-74	TRANSISTOR	DTC143TS	R116	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q203	8-729-821-31	TRANSISTOR	2SD1012-FG	R117	1-249-417-11	CARBON	1K 5% 1/4W F
Q301	8-729-900-65	TRANSISTOR	DTA144ES	R118	1-249-429-11	CARBON	10K 5% 1/4W
Q302	8-729-900-89	TRANSISTOR	DTC144ES	R119	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q303	8-729-900-89	TRANSISTOR	DTC144ES	R120	1-249-421-11	CARBON	2.2K 5% 1/4W F
Q304	8-729-820-24	TRANSISTOR	2SC3330-T	R121	1-249-429-11	CARBON	10K 5% 1/4W
Q305	8-729-900-89	TRANSISTOR	DTC144ES	R122	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q306	8-729-821-04	TRANSISTOR	2SA1317-STU	R124	1-249-429-11	CARBON	10K 5% 1/4W
Q307	8-729-900-65	TRANSISTOR	DTA144ES	R125	1-249-437-11	CARBON	47K 5% 1/4W
Q308	8-729-900-65	TRANSISTOR	DTA144ES	R126	1-249-431-11	CARBON	15K 5% 1/4W
Q309	8-729-900-89	TRANSISTOR	DTC144ES	R127	1-249-409-11	CARBON	220 5% 1/4W F
Q310	8-729-900-65	TRANSISTOR	DTA144ES	R128	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q311	8-729-900-61	TRANSISTOR	DTA114ES	R129	1-247-883-00	CARBON	150K 5% 1/4W
Q312	8-729-900-80	TRANSISTOR	DTC114ES	R130	1-249-393-11	CARBON	10 5% 1/4W F
Q313	8-729-900-80	TRANSISTOR	DTC114ES	R131	1-249-432-11	CARBON	18K 5% 1/4W
Q314	8-729-900-80	TRANSISTOR	DTC114ES	R132	1-249-429-11	CARBON	10K 5% 1/4W
Q315	8-729-821-04	TRANSISTOR	2SA1317-STU	R201	1-249-435-11	CARBON	33K 5% 1/4W
Q316	8-729-194-57	TRANSISTOR	2SC945-P	R202	1-249-403-11	CARBON	68 5% 1/4W F
Q317	8-729-194-57	TRANSISTOR	2SC945-P	R203	1-247-882-11	CARBON	130K 5% 1/4W
Q318	8-729-900-65	TRANSISTOR	DTA144ES	R204	1-249-426-11	CARBON	5.6K 5% 1/4W
Q701	8-729-900-80	TRANSISTOR	DTC114ES	R205	1-249-420-11	CARBON	1.8K 5% 1/4W F
Q702	8-729-900-80	TRANSISTOR	DTC114ES	R207	1-247-887-00	CARBON	220K 5% 1/4W
Q703	8-729-900-80	TRANSISTOR	DTC114ES	R208	1-247-840-00	CARBON	2.4K 5% 1/4W
Q704	8-729-820-24	TRANSISTOR	2SC3330-T	R210	1-249-423-11	CARBON	3.3K 5% 1/4W F
Q705	8-729-820-24	TRANSISTOR	2SC3330-T	R211	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q706	8-729-900-89	TRANSISTOR	DTC144ES	R212	1-247-864-11	CARBON	24K 5% 1/4W
Q707	8-729-821-04	TRANSISTOR	2SA1317-STU	R213	1-249-414-11	CARBON	560 5% 1/4W F
Q708	8-729-900-61	TRANSISTOR	DTA114ES	R215	1-249-421-11	CARBON	2.2K 5% 1/4W F
Q709	8-729-900-61	TRANSISTOR	DTA114ES	R216	1-249-428-11	CARBON	8.2K 5% 1/4W F
Q712	8-729-900-65	TRANSISTOR	DTA144ES	R217	1-249-417-11	CARBON	1K 5% 1/4W F
Q713	8-729-900-65	TRANSISTOR	DTA144ES	R218	1-249-429-11	CARBON	10K 5% 1/4W
Q715	8-729-900-80	TRANSISTOR	DTC114ES	R219	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q720	8-729-900-80	TRANSISTOR	DTC114ES	R220	1-249-421-11	CARBON	2.2K 5% 1/4W F
Q721	8-729-801-84	TRANSISTOR	2SB1013-4	R221	1-249-429-11	CARBON	10K 5% 1/4W
Q801	8-729-140-96	TRANSISTOR	2SD774-34	R222	1-249-425-11	CARBON	4.7K 5% 1/4W F
Q802	8-729-140-96	TRANSISTOR	2SD774-34	R224	1-249-429-11	CARBON	10K 5% 1/4W
< RESISTOR >				R225	1-249-437-11	CARBON	47K 5% 1/4W
R101	1-249-435-11	CARBON	33K 5% 1/4W	R226	1-249-431-11	CARBON	15K 5% 1/4W
R102	1-249-403-11	CARBON	68 5% 1/4W F	R227	1-249-409-11	CARBON	220 5% 1/4W F
R103	1-247-882-11	CARBON	130K 5% 1/4W	R228	1-249-428-11	CARBON	8.2K 5% 1/4W F
R104	1-249-426-11	CARBON	5.6K 5% 1/4W	R229	1-247-883-00	CARBON	150K 5% 1/4W
R105	1-249-420-11	CARBON	1.8K 5% 1/4W F	R230	1-249-393-11	CARBON	10 5% 1/4W F
R107	1-247-887-00	CARBON	220K 5% 1/4W	R231	1-249-432-11	CARBON	18K 5% 1/4W
R108	1-247-840-00	CARBON	2.4K 5% 1/4W	R232	1-249-429-11	CARBON	10K 5% 1/4W
R110	1-249-423-11	CARBON	3.3K 5% 1/4W F	R301	1-249-409-11	CARBON	220 5% 1/4W F
R111	1-249-428-11	CARBON	8.2K 5% 1/4W F	R302	1-249-409-11	CARBON	220 5% 1/4W F
R112	1-247-864-11	CARBON	24K 5% 1/4W	R303	1-249-433-11	CARBON	22K 5% 1/4W
R113	1-249-414-11	CARBON	560 5% 1/4W F	R304	1-249-435-11	CARBON	33K 5% 1/4W
				R305	1-249-436-11	CARBON	39K 5% 1/4W

Continued on page 15.

• IC BLOCK DIAGRAM



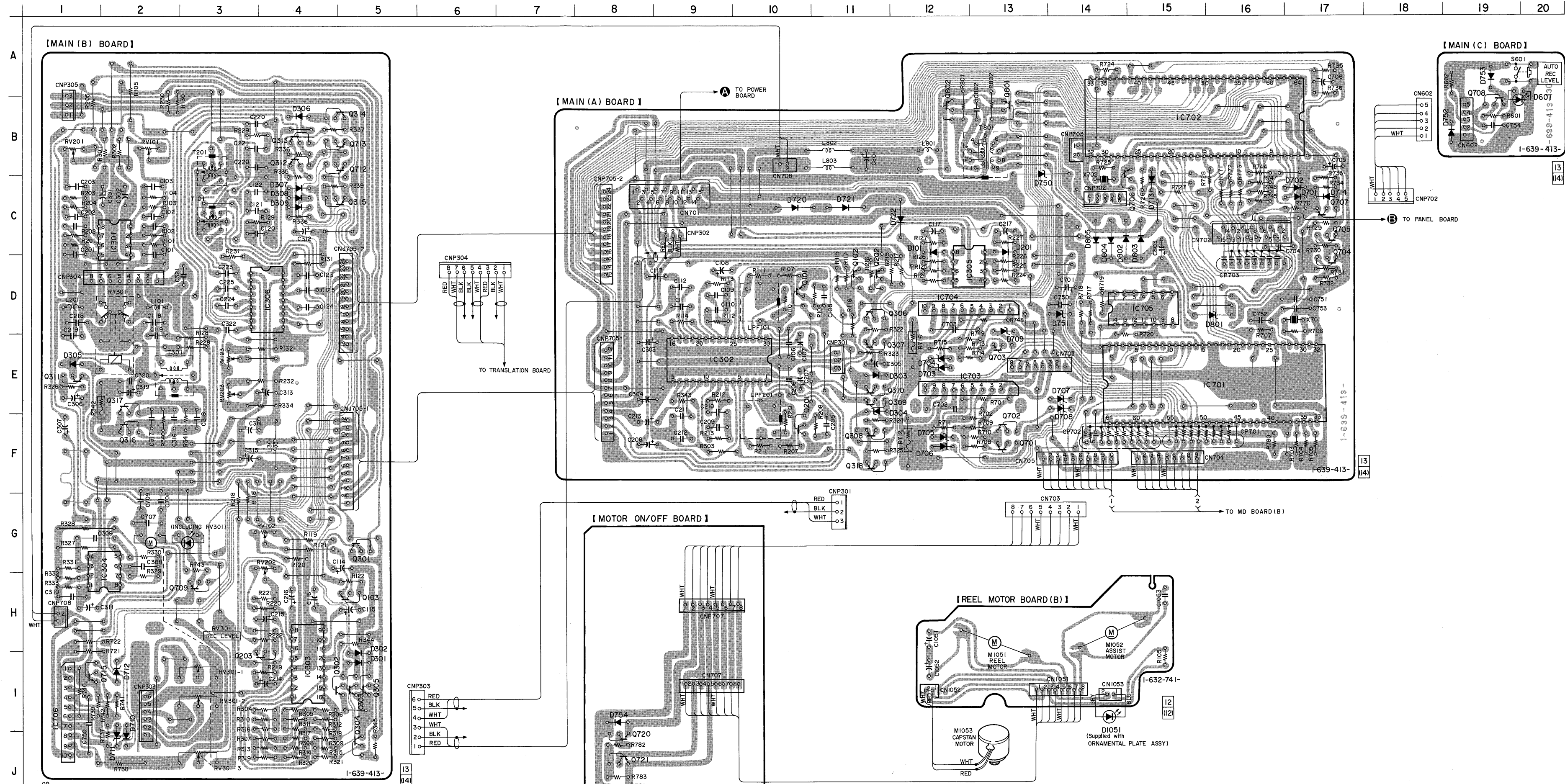
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	C-12	Q301	G-5
D201	C-13	Q302	I-5
D301	I-5	Q303	I-5
D302	I-5	Q304	J-5
D303	E-11	Q305	I-5
D304	E-11	Q306	D-11
D305	E-1	Q307	E-11
D306	B-4	Q308	F-11
D307	C-4	Q309	E-11
D308	C-4	Q310	E-11
D309	C-4	Q311	E-1
D601	A-20	Q312	B-4
D701	C-17	Q313	B-4
D702	C-17	Q314	B-5
D703	E-12	Q315	C-5
D704	E-12	Q316	F-2
D705	F-12	Q317	E-2
D706	F-12	Q318	F-11
D707	E-14	Q701	F-13
D708	E-14	Q702	F-13
D709	E-13	Q703	E-13
D710	J-2	Q704	D-17
D711	J-2	Q705	C-17
D712	I-2	Q706	C-15
D713	C-15	Q707	C-17
D714	C-17	Q708	B-19
D720	C-10	Q709	H-3
D721	C-11	Q712	B-5
D722	C-12	Q713	B-5
D750	B-13	Q715	I-1
D751	D-14	Q720	I-8
D752	B-19	Q721	J-8
D753	A-19	Q801	B-13
D754	I-8	Q802	B-11
D801	D-16		
D802	C-15		
D803	C-15		
D804	C-14		
D805	C-14		
IC301	C-2		
IC302	E-9		
IC303	I-4		
IC304	H-2		
IC305	D-13		
IC306	D-4		
IC701	E-16		
IC702	B-15		
IC703	E-13		
IC704	D-13		
IC705	D-15		
IC706	I-1		
IC1001	H-18		
IC1002	H-19		
Q101	D-10		
Q102	D-11		
Q103	H-5		
Q201	F-10		
Q202	D-11		
Q203	I-4		

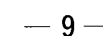
Note on Mounting Diagram:

- : parts extracted from the component side.
- : parts mounted on the conductor side.

PRINTED WIRING BOARDS — MAIN SECTION —







Continued from page 4.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R306	1-247-880-11	CARBON	110K 5% 1/4W	R709	1-247-830-11	CARBON	910 5% 1/4W
R307	1-247-885-00	CARBON	180K 5% 1/4W	R710	1-249-418-11	CARBON	1. 2K 5% 1/4W F
R308	1-249-436-11	CARBON	39K 5% 1/4W	R711	1-249-417-11	CARBON	1K 5% 1/4W F
R309	1-247-881-00	CARBON	120K 5% 1/4W	△R712	1-212-950-00	FUSIBLE	4. 7 5% 1/2W F
R310	1-247-874-11	CARBON	62K 5% 1/4W	R713	1-249-421-11	CARBON	2. 2K 5% 1/4W F
R311	1-247-872-11	CARBON	51K 5% 1/4W	R714	1-249-419-11	CARBON	1. 5K 5% 1/4W F
R312	1-247-889-00	CARBON	270K 5% 1/4W	R715	1-249-417-11	CARBON	1K 5% 1/4W F
R313	1-247-883-00	CARBON	150K 5% 1/4W	△R716	1-212-950-00	FUSIBLE	4. 7 5% 1/2W F
R314	1-247-870-11	CARBON	43K 5% 1/4W	R717	1-249-436-11	CARBON	39K 5% 1/4W
R315	1-247-893-11	CARBON	390K 5% 1/4W	R718	1-249-436-11	CARBON	39K 5% 1/4W
R316	1-249-438-11	CARBON	56K 5% 1/4W	R719	1-247-887-00	CARBON	220K 5% 1/4W
R317	1-247-872-11	CARBON	51K 5% 1/4W	R720	1-247-887-00	CARBON	220K 5% 1/4W
R318	1-247-876-11	CARBON	75K 5% 1/4W	R721	1-249-425-11	CARBON	4. 7K 5% 1/4W F
R319	1-249-441-11	CARBON	100K 5% 1/4W	R722	1-249-425-11	CARBON	4. 7K 5% 1/4W F
R320	1-249-438-11	CARBON	56K 5% 1/4W	R724	1-249-433-11	CARBON	22K 5% 1/4W
R321	1-247-881-00	CARBON	120K 5% 1/4W	R725	1-247-903-00	CARBON	1M 5% 1/4W
R322	1-249-433-11	CARBON	22K 5% 1/4W	R726	1-249-429-11	CARBON	10K 5% 1/4W
R323	1-249-409-11	CARBON	220 5% 1/4W F	R727	1-249-425-11	CARBON	4. 7K 5% 1/4W F
R324	1-249-433-11	CARBON	22K 5% 1/4W	R728	1-249-425-11	CARBON	4. 7K 5% 1/4W F
R325	1-249-433-11	CARBON	22K 5% 1/4W	R729	1-249-425-11	CARBON	4. 7K 5% 1/4W F
R326	1-249-425-11	CARBON	4. 7K 5% 1/4W F	R730	1-249-433-11	CARBON	22K 5% 1/4W
R327	1-247-887-00	CARBON	220K 5% 1/4W	R731	1-249-433-11	CARBON	22K 5% 1/4W
R328	1-249-429-11	CARBON	10K 5% 1/4W	R732	1-249-424-11	CARBON	3. 9K 5% 1/4W F
R329	1-249-441-11	CARBON	100K 5% 1/4W	R733	1-249-429-11	CARBON	10K 5% 1/4W
R330	1-249-428-11	CARBON	8. 2K 5% 1/4W F	R734	1-249-441-11	CARBON	100K 5% 1/4W
R331	1-249-423-11	CARBON	3. 3K 5% 1/4W F	R735	1-249-439-11	CARBON	68K 5% 1/4W
R332	1-249-417-11	CARBON	1K 5% 1/4W F	R736	1-249-417-11	CARBON	1K 5% 1/4W F
R333	1-249-441-11	CARBON	100K 5% 1/4W	R737	1-249-417-11	CARBON	1K 5% 1/4W F
R334	1-249-441-11	CARBON	100K 5% 1/4W	△R738	1-212-950-00	FUSIBLE	4. 7 5% 1/2W F
R335	1-249-419-11	CARBON	1. 5K 5% 1/4W F	R739	1-249-429-11	CARBON	10K 5% 1/4W
R336	1-247-848-11	CARBON	5. 1K 5% 1/4W	R740	1-249-429-11	CARBON	10K 5% 1/4W
R337	1-249-421-11	CARBON	2. 2K 5% 1/4W F	R741	1-249-415-11	CARBON	680 5% 1/4W F
R338	1-249-429-11	CARBON	10K 5% 1/4W	R742	1-249-420-11	CARBON	1. 8K 5% 1/4W F
R339	1-249-429-11	CARBON	10K 5% 1/4W	R743	1-249-410-11	CARBON	270 5% 1/4W F
R340	1-249-437-11	CARBON	47K 5% 1/4W	R744	1-249-421-11	CARBON	2. 2K 5% 1/4W F
R341	1-249-437-11	CARBON	47K 5% 1/4W	R745	1-249-421-11	CARBON	2. 2K 5% 1/4W F
△R342	1-212-851-00	FUSIBLE	5. 6 5% 1/4W F	R746	1-249-421-11	CARBON	2. 2K 5% 1/4W F
R343	1-215-455-00	METAL	27K 1% 1/6W	R747	1-249-421-11	CARBON	2. 2K 5% 1/4W F
R344	1-247-864-11	CARBON	24K 5% 1/4W	R748	1-249-429-11	CARBON	10K 5% 1/4W
R345	1-249-437-11	CARBON	47K 5% 1/4W	R749	1-249-429-11	CARBON	10K 5% 1/4W
R601	1-249-410-11	CARBON	270 5% 1/4W F	R770	1-249-389-11	CARBON	4. 7 5% 1/4W F
R602	1-249-415-11	CARBON	680 5% 1/4W F	R771	1-247-807-31	CARBON	100 5% 1/4W
R701	1-249-429-11	CARBON	10K 5% 1/4W	R772	1-247-807-31	CARBON	100 5% 1/4W
R702	1-249-429-11	CARBON	10K 5% 1/4W	R773	1-247-807-31	CARBON	100 5% 1/4W
R703	1-249-425-11	CARBON	4. 7K 5% 1/4W F	R780	1-249-433-11	CARBON	22K 5% 1/4W
R704	1-249-425-11	CARBON	4. 7K 5% 1/4W F	R781	1-249-433-11	CARBON	22K 5% 1/4W
R705	1-249-425-11	CARBON	4. 7K 5% 1/4W F	R782	1-249-413-11	CARBON	470 5% 1/4W F
R706	1-247-903-00	CARBON	1M 5% 1/4W	R783	1-249-429-11	CARBON	10K 5% 1/4W
R707	1-249-433-11	CARBON	22K 5% 1/4W	R801	1-249-431-11	CARBON	15K 5% 1/4W
R708	1-249-411-11	CARBON	330 5% 1/4W	R802	1-249-431-11	CARBON	15K 5% 1/4W

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

MAIN

REEL MOTOR

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
< VARIABLE RESISTOR >							
RV101	1-238-597-11	RES, ADJ, CARBON 1K					
RV102	1-238-600-11	RES, ADJ, CARBON 10K					
RV103	1-238-601-11	RES, ADJ, CARBON 22K					
RV201	1-238-597-11	RES, ADJ, CARBON 1K					
RV202	1-238-600-11	RES, ADJ, CARBON 10K					
RV203	1-238-601-11	RES, ADJ, CARBON 22K					
RV301	1-241-232-11	RES, VAR, CARBON 20K/20K/20K (REC LEVEL)					
< RELAY >							
RY301	1-515-726-11	RELAY					
< SWITCH >							
S601	1-554-303-21	SWITCH, TACTILE (AUTO REC LEVEL)					
S605	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)					
< TRANSFORMER >							
T101	1-433-335-11	TRANSFORMER, BIAS OSCILLATION					
T201	1-433-335-11	TRANSFORMER, BIAS OSCILLATION					
T301	1-433-336-11	TRANSFORMER, BIAS OSCILLATION					
T801	1-450-673-11	TRANSFORMER, DC-DC CONVERTER					
< VIBRATOR >							
X701	1-577-358-21	VIBRATOR, CERAMIC (4MHz)					
X702	1-577-358-21	VIBRATOR, CERAMIC (4MHz)					
*****							
*	1-632-741-11	REEL MOTOR BOARD					
		*****					
< CAPACITOR >							
C1051	1-124-907-11	ELECT	10uF 20% 50V				
C1052	1-124-907-11	ELECT	10uF 20% 50V				
C1053	1-164-159-11	CERAMIC	0.1uF 50V				
< CONNECTOR >							
CN1051	1-564-501-11	PIN, CONNECTOR 8P					
* CN1052	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P					
* CN1053	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P					
< RESISTOR >							
R1051	1-247-825-31	CARBON	560 5% 1/4W				
*****							



