

Service Manual

ORDER NO.
RRV 1833

FILE-TYPE CD PLAYER

PD-F1006

● Refer to the service manual RRV1723 for PD-F906/KU.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	PD-F1006		
KU/CA	○	AC120V	————
RD	○	AC110 – 127V/220 – 240V	With the voltage selector

CONTENTS

1. CONTRAST OF MISCELLANEOUS PARTS	2
2. SCHEMATIC DIAGRAM	6
3. PCB CONNECTION DIAGRAM	10
4. ADJUSTMENT	14

1. CONTRAST OF MISCELLANEOUS PARTS

- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Ref. No. : Numbers following P and hyphen (-) indicate the page(s) and location number(s) in the RRV1723 service manual, respectively.
 - When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω	→	56 × 10 ¹	→	561	.....	RD1/4PU	5	6	1	J
47k Ω	→	47 × 10 ³	→	473	.....	RD1/4PU	4	7	3	J
0.5 Ω	→	R50	.....			RN2H	R	5	0	K
1 Ω	→	1R0	.....			RS1P	1	R	0	K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	→	562 × 10 ¹	→	5621	RN1/4PC	5	6	2	1	F
----------------	---	-----------------------	---	------	-------	---------	---	---	---	---	---

■ CONTRAST TABLE

PD-F1006/KU/CA, RD and PD-F906/KU are constructed the same except for the following:

Ref.No.	Mark	Symbol and Description	Part No.			Remarks
			PD-F906/KU	PD-F1006/KU/CA	PD-F1006/RD	
		PACKING				
P3-3		Remote Control Unit	PWW1108	PWW1110	PWW1110	
P3-5	NSP	Warranty Card	ARY1044	ARY1044	Not used	
P3-6		Operating Instructions (Spanish/Chinese)	Note used	Not used	PRD1022	
P3-6		Operating Instructions (English)	PRB1253	PRB1258	PRB1258	
P3-7	NSP	Battery(R6P.AA)	VEM - 013	Not used	Not used	
P3-7	NSP	Battery(LR6)	Not used	AEX1007	AEX1007	
P3-11		Packing Case	PHG2226	PHG2270	PHG2270	
		Jacket File	Not used	PHN1049	PHN1049	*1. No.1
		Index Label 100	Not used	PRW1406	PRW1406	*1. No.2
		Video Cable	Not used	VDE1034	VDE1034	*1. No.3
		EXTERIOR				
	NSP	MOTHER BOARD ASSY	PWM2119	PWM2127	PWM2128	
P6-1	Δ	└ MAIN BOARD ASSY	PWZ3400	PWZ3408	PWZ3409	
P6-2	Δ	└ POWER BOARD ASSY	PWZ3414	PWZ3420	PWZ3421	
P6-3		└ DISPLAY BOARD ASSY	PWZ3426	PWZ3429	PWZ3429	
P6-4	NSP	└ SWITCH BOARD ASSY	PWZ3432	PWZ3435	PWZ3435	
	NSP	└ HEADPHONE BOARD ASSY	Not used	PWZ3447	PWZ3448	*1. No.4 and *2
P6-5	NSP	└ DOOR BOARD ASSY	PWZ3441	PWZ3449	PWZ3449	
P6-6	NSP	└ CENTER LED BOARD ASSY	PWZ3443	PWZ3451	PWZ3451	
	NSP	GUI BOARD ASSY	Not used	PWX1498	PWX1499	
		└ μ COM BOARD ASSY	Not used	PWZ3485	PWZ3486	*1. No.5
		└ KEY BOARD ASSY	Not used	PWZ3492	PWZ3493	*1. No.6 and *3
P6-10	Δ	Cord Stopper	CM - 22C	CM - 22C	CM - 22B	
P6-11		32P F.F.C/30V	PDD1167	Not used	Not used	
P6-11		38P F.F.C/30V	Not used	PDD1169	PDD1169	
P6-12	Δ	AC Power Cord	PDG1015	PDG1015	PDG1056	
P6-13		Rubber Sheet	AEB1111	Not used	Not used	
P6-14		Foot Assy	AEC1531	Not used	Not used	
P6-18		Rear Base	PNA2317	PNA2372	PNA2379	
P6-46		Name Plate	PAM1704	VAM1032	VAM1032	
P6-47		Display Window	PAM1725	PAM1728	PAM1728	
P6-50		Operation Panel	PNW2742	PNW2740	PNW2740	
P6-55		65 Label	ORW1069	ORW1069	Not used	
		Insulator	Not used	PNW1912	PNW1912	*1. No.7
		LED Lens	Not used	PNW2019	PNW2019	*1. No.8
		Knob	Not used	PAC1707	PAC1707	*1. No.9
	NSP	SR Angle	Not used	PNB1192	PNB1192	*1. No.10
		Ferrite Core	Not used	PTH1021	PTH1021	*1. No.11

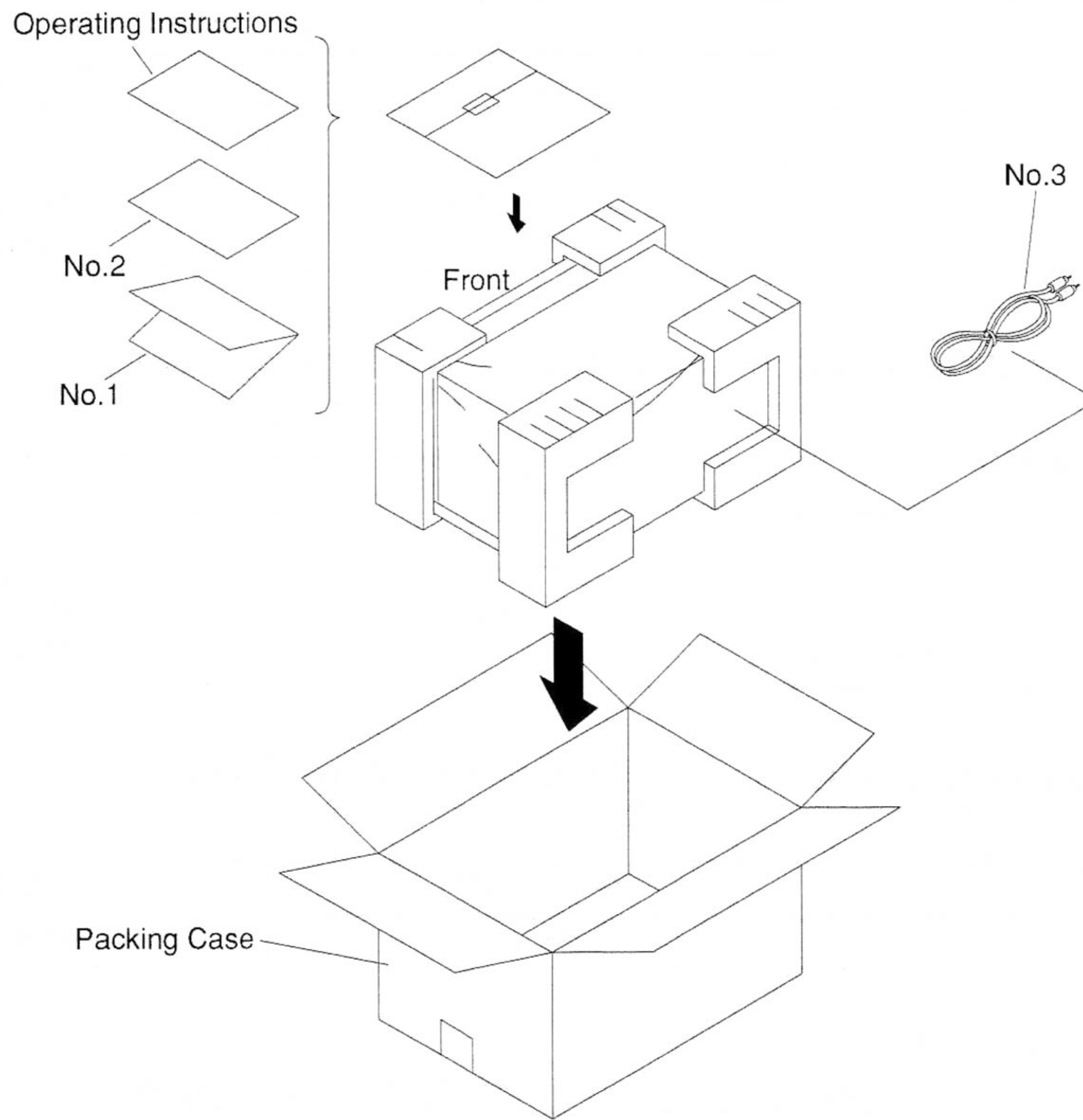
Note *1 : The numbers in the remarks column correspond to the numbers on the exploded diagram. Refer to "EXPLODED VIEWS".

Note *2 : Although PWZ3447 and PWZ3448 are different in part number, they consist of the same components.

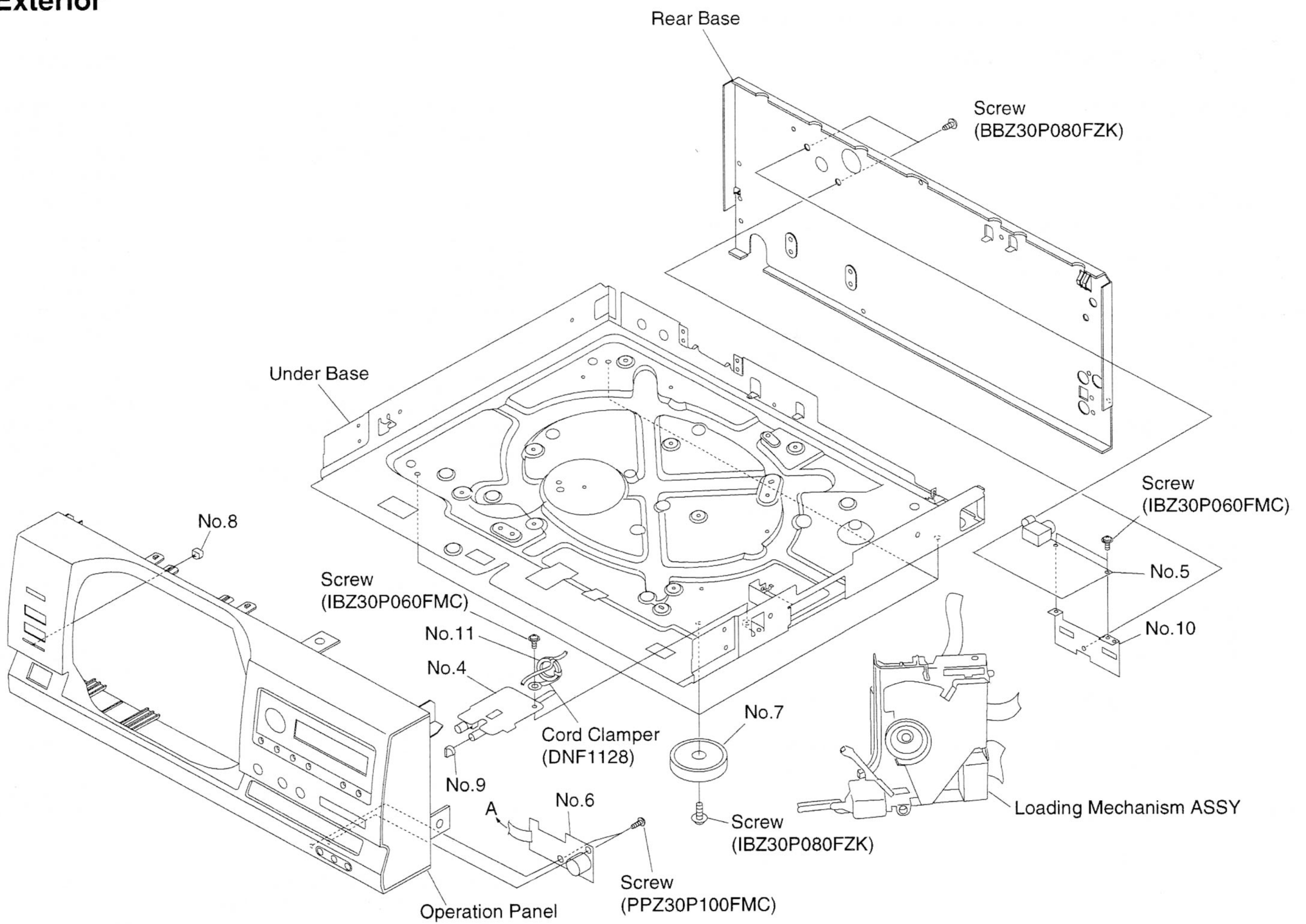
Note *3 : Although PWZ3492 and PWZ3493 are different in part number, they consist of the same components.

■ EXPLODED VIEWS

● Packing



● Exterior



PD-F1006

■ CONTRAST OF PCB ASSEMBLIES

MAIN BOARD ASSY

PWZ3409 and PWZ3408 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3408	PWZ3409	
	D1301 – D1309, D1312 – D1314 R1301 – R1305, R1307 R1310 – R1312 JA394 (INTERFACE JACK)	ISS254 RD1/4PU471J RD1/4PU103J DKN1035	Not used Not used Not used Not used	

POWER BOARD ASSY

PWZ3421 and PWZ3420 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3420	PWZ3421	
△ △ △ △	IC31 Power Transformer (AC120V) Power Transformer (AC110 – 127V/220 – 240V) S5 Voltage Selector (AC110 – 127V/220 – 240V)	Not used PTT1318 Not used Not used	ICP – N10 Not used PTT1320 PSB1006	

μ COM BOARD ASSY

PWZ3486 and PWZ3485 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3485	PWZ3486	
	S901	Not used	RSH1039	

■ PCB PART'S LIST (KU/CA TYPE)

Mark No. Description Parts No.

DF SELECT MOTOR BOARD ASSY

SELECT MOTOR BOARD assembly has no service part.

BF SENSOR BOARD ASSY

SEMICONDUCTORS

Q601, Q602 DTC124ES
D601, D602 GP1S53V

RESISTORS

All Resistors RD1/4PU□□□J

HF MAIN BOARD ASSY

SEMICONDUCTORS

IC406 BA15218
IC151 CXA1782CQ
IC301 CXD2529Q
△ IC203 LA6517
△ IC201, IC202 LA6520

IC302 LC89170M
IC405 NJM4558DX
△ IC71 NJM79M05FA
IC401 PD2026B
IC351 PD4837A

Q151 2SA854S
Q381, Q391 2SC1740S
Q403, Q404 2SD2144S
Q152 DTA124ES
Q321, Q322, Q405 DTC124ES

D1301 – D1309, D1312 – D1314, D218 1SS254
D391 – D397 1SS254

COILS AND FILTERS

L351 LAU100J
L391, L395, L396 LAU1R0J

Mark No. Description Parts No.

CAPACITORS

C181 CCCCH100D50
C403 CCCCH120J50
C404 CCCCH220J50
C353, C392, C397 CCCSL101J50
C315 CCCSL221J50

C429, C430, C435–C438 CCCSL390J50
C171, C175, C301, C302 CEAS101M10
C311 – C314, C316, C322, C380 CEAS101M10
C73 CEAS101M10
C433, C434 CEAS220M25

C131 – C133, C211, C212 CEAS330M16
C431, C432 CEAS330M16
C351, C401, C74 CEAS471M6R3
C169, C170, C356 CEAS4R7M50
C309 CEASR47M50

C1309, C153 – C155, C158, C230 CFTXA104J50
C250, C321, C354, C355, C364 CFTXA104J50
C381, C398, C413 – C416 CFTXA104J50
C157 CFTXA823J50
C156, C161, C164, C168, C218 CGCYX103K25

C160 CGCYX333K25
C152, C307 CGCYX473K25
C163 CKCYB102K50
C176, C306, C441, C442 CKCYB152K50
C305 CKCYB222K50

C162 CKCYB332K50
C167 CKCYB472K50
C151 CKCYB682K50
C1308, C159, C172, C185, C205 CKCYF103Z50
C210, C215, C219, C304, C318 CKCYF103Z50

C323, C358, C359, C362, C366 CKCYF103Z50
C387, C461, C81 CKCYF103Z50

RESISTORS

VR153, VR155 (10kΩ/0.1W) RCP1045
VR151, VR152, VR154 (22kΩ/0.1W) RCP1046
VR156 (220kΩ/0.1W) RCP1049
Other Resistors RD1/4PU□□□J

Mark No.	Description	Parts No.
OTHERS		
CN207	MT 4P CONNECTOR	173981 - 4
CN208, CN401	3P JUMPER CONNECTOR	52147 - 0310
CN205	4P JUMPER CONNECTOR	52147 - 0410
CN203	5P JUMPER CONNECTOR	52147 - 0510
CN204	7P JUMPER CONNECTOR	52147 - 0710
CN352	9P JUMPER CONNECTOR	52147 - 0910
CN11	12PJUMPER CONNECTOR	52147 - 1210
JA394		DKN1035
JA321	OPTICAL LINK OUT	GP1F32T
CN351	CONNECTOR	HLEM38S - 1
JA401	JACK	PKB1032
JA393	JACK	PKN1005
X401	XTAL RES (OSC)(16.934MHz)	PSS1008
JA391, JA392	JACK	RKN1004
CN201	CONNECTOR 6P	RKP - 533
CN202	CONNECTOR SCREW PLATE	SLW16S - 1C7 VNE1948
X351	CERAMIC RESONATOR (4.19MHz)	VSS1028

KF POWER BOARD ASSY

SEMICONDUCTORS

△ IC23	PQ05RA1
△ IC21	PQ05RR12
D54	MTZJ18B
△ D11 - D14, D41, D42, D52	S5688G

CAPACITORS

C27, C42	CEAS101M10
C52	CEAS101M35
C26	CEAS222M16
C11, C13, C15, C16	CKCYF103Z50
C25, C41 (6800µF/16V)	VCH1060

RESISTORS

All Resistors	RD1/4PU□□□J
---------------	-------------

OTHERS

△ POWER TRANSFORMER	PTT1318
△ TERMINAL	RKC - 061

IF DISPLAY BOARD ASSY

SEMICONDUCTORS

Q711	2SC1740S
D701 - D705	1SS254
D711, D712	MAY5063X

SWITCHES AND RELAYS

S703, S704, S707 - S720	PSG1006
-------------------------	---------

RESISTORS

All Resistors	RD1/4PU□□□J
---------------	-------------

OTHERS

CN701	CONNECTOR	HLEM38R - 1
V701	FL INDICATOR TUBE	PEL1089

JF SWITCH BOARD ASSY

SEMICONDUCTORS

D751	PCX1019
------	---------

SWITCHES AND RELAYS

S751 - S753	PSG1006
-------------	---------

CAPACITORS

C752	CKCYF103Z50
------	-------------

RESISTORS

All Resistors	RD1/4PU□□□J
---------------	-------------

OTHERS

REMOTE RECEIVER UNIT	GP1U27X
----------------------	---------

LF HEADPHONE BOARD ASSY

COILS AND FILTERS

△ L501, L504, L505	LAU1R0J
--------------------	---------

Mark No.	Description	Parts No.
CAPACITORS		
△ C501, C502		CKCYF223Z50
△ C503, C504		CKCYF473Z50

RESISTORS

VR501 (0.5kΩ·B)	PCS1003
-----------------	---------

OTHERS

JA501	JACK	RKN1002
KN501	EARTH METAL FITTING	VNFI084

GF DOOR BOARD ASSY

OTHERS

REAF SWITCH	VSK1011
-------------	---------

FF CENTER LED BOARD ASSY

SEMICONDUCTORS

D1601 - D1603	SLR - 342YCT31
---------------	----------------

RESISTORS

All Resistors	RD1/4PU□□□J
---------------	-------------

MF µCOM BOARD ASSY

SEMICONDUCTORS

IC902	LH5168N - 10L
IC904	MM1031XS
IC901	PD4838A
IC903	PD6222A
Q901	2SC1740S

D901	1SS133X
------	---------

COILS AND FILTERS

L901	LFA100K
L911	LFA220J
L902, L913	RTF1167

CAPACITORS

C914	CCSQCH150J50
C916	CCSQCH330J50
C915	CCSQCH470J50
C913	CCSQCH8R0D50
C911, C912, C921	CEAS101M10

C901, C923	CEAS471M6R3
C903 - C905, C927	CKSQYF103Z50
C922, C925, C928, C930, C943	CKSQYF104Z50
C945	CKSQYF104Z50
C902 (0.1F/5.5V)	PCH1106

VC911	PCM1001
-------	---------

RESISTORS

All Resistors	RS1/10S□□□J
---------------	-------------

OTHERS

CN903	4P JUMPER CONNECTOR	52147 - 0410
CN902	5P JUMPER CONNECTOR	52147 - 0510
X911	CRYSTAL RESONATOR	ASS1056
CN901	PLUG 3 - P	KM250MA3
JA901	JACK	VKB1063

X901	CERAMIC RESONATOR	VSS1028
------	-------------------	---------

NF KEYBOARD ASSY

SEMICONDUCTORS

D902, D903	DA204K
------------	--------

CAPACITORS

C933	CEAL101M6R3
C934, C939 - C942	CKSQYF104Z50

RESISTORS

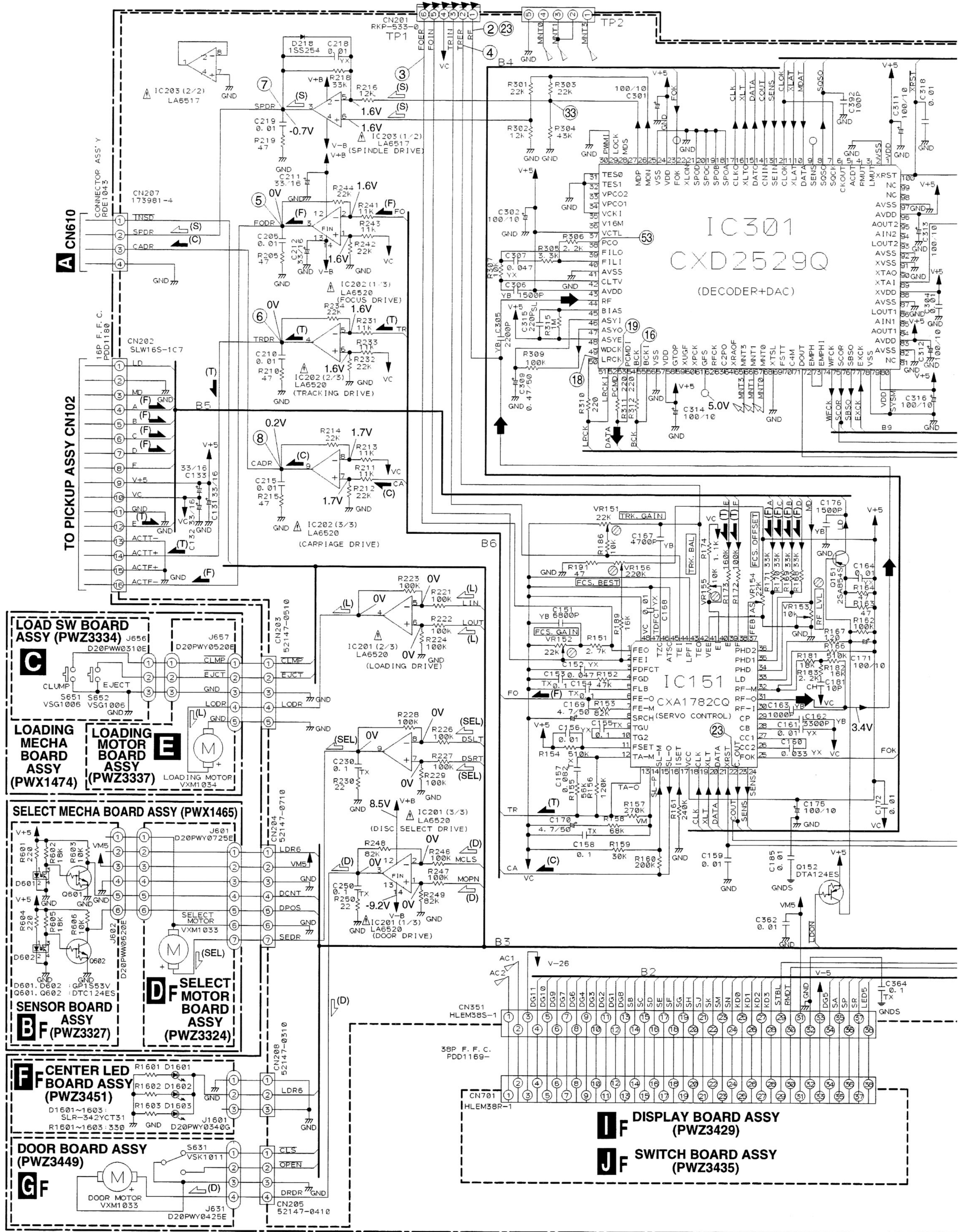
All Resistors	RS1/10S□□□J
---------------	-------------

OTHERS

JA902	RKN1038
-------	---------

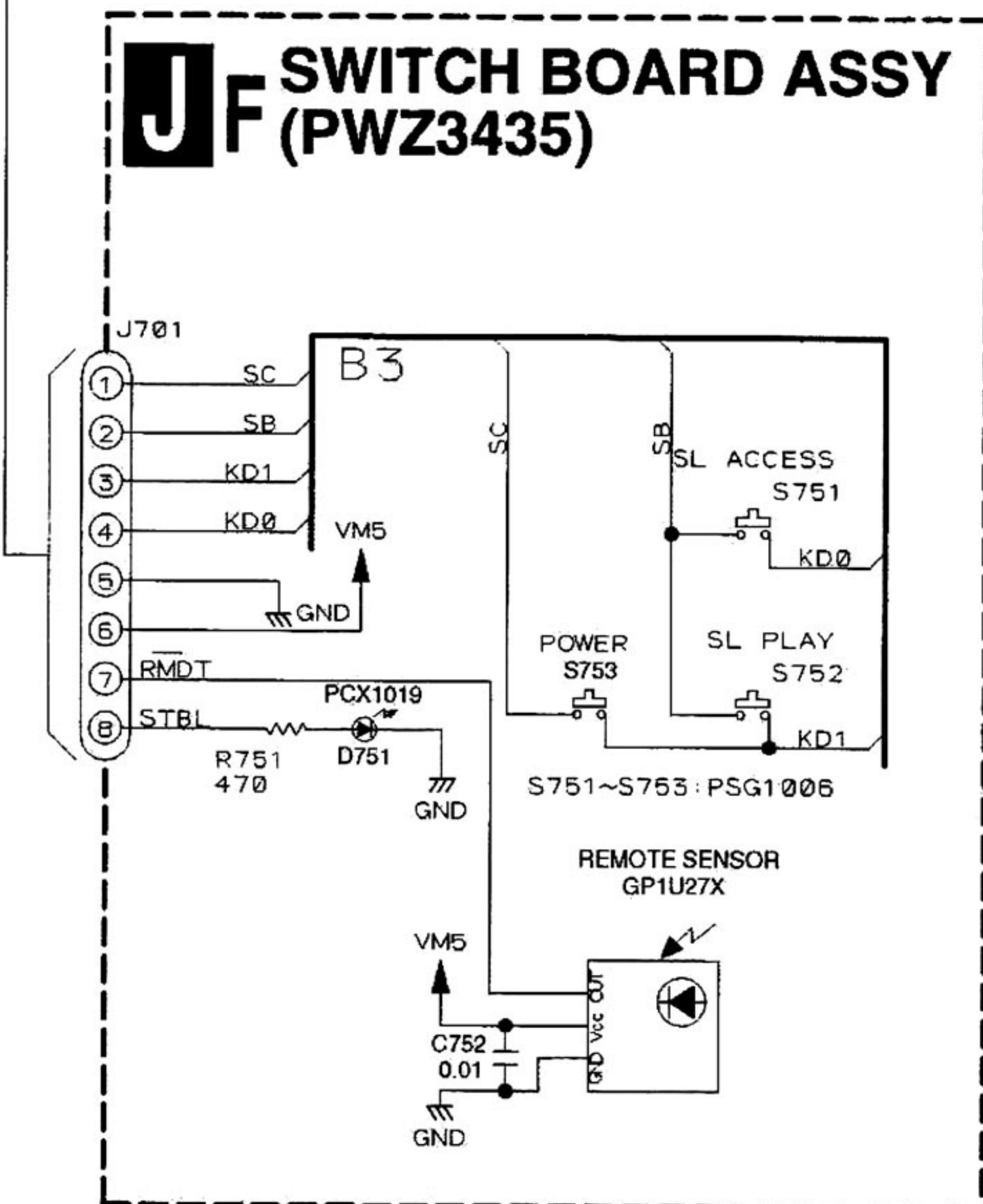
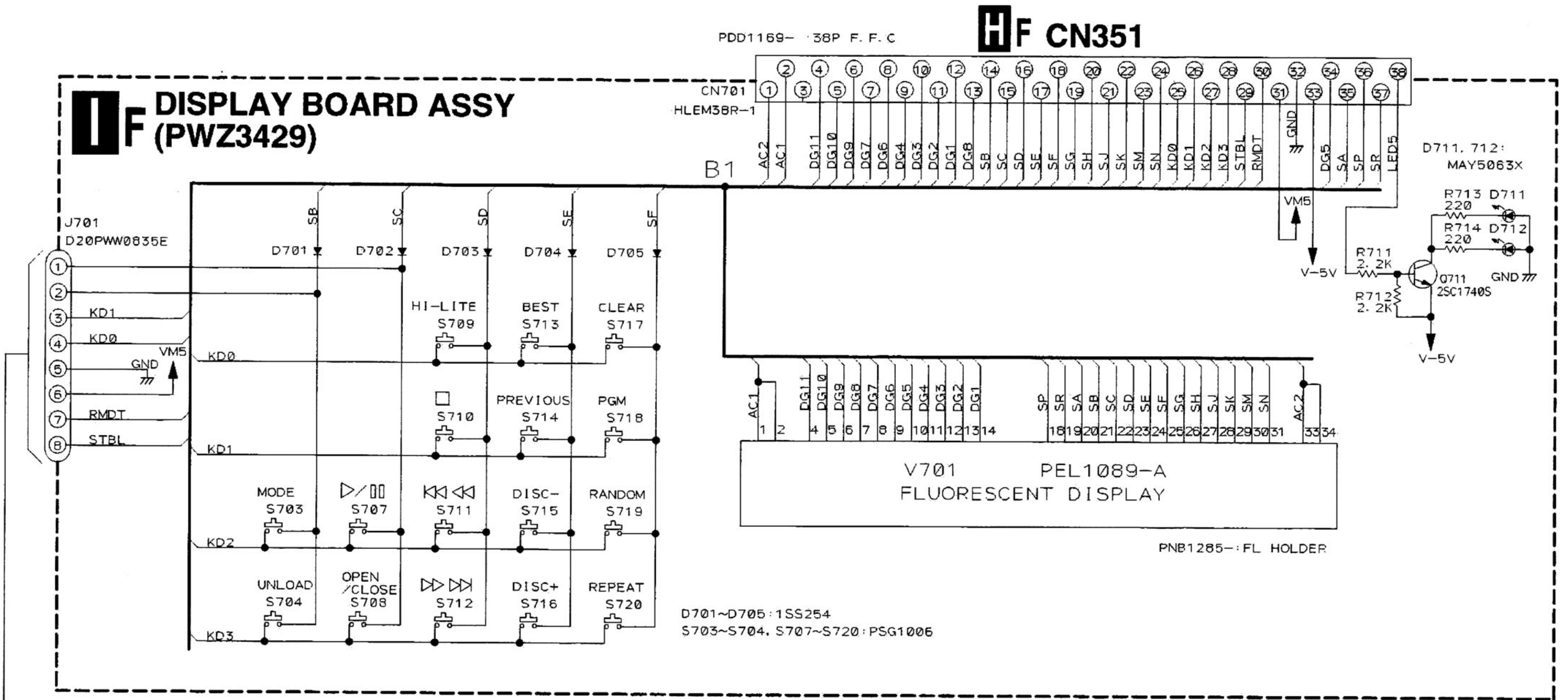
2. SCHEMATIC DIAGRAM

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "PCB PARTS LIST".

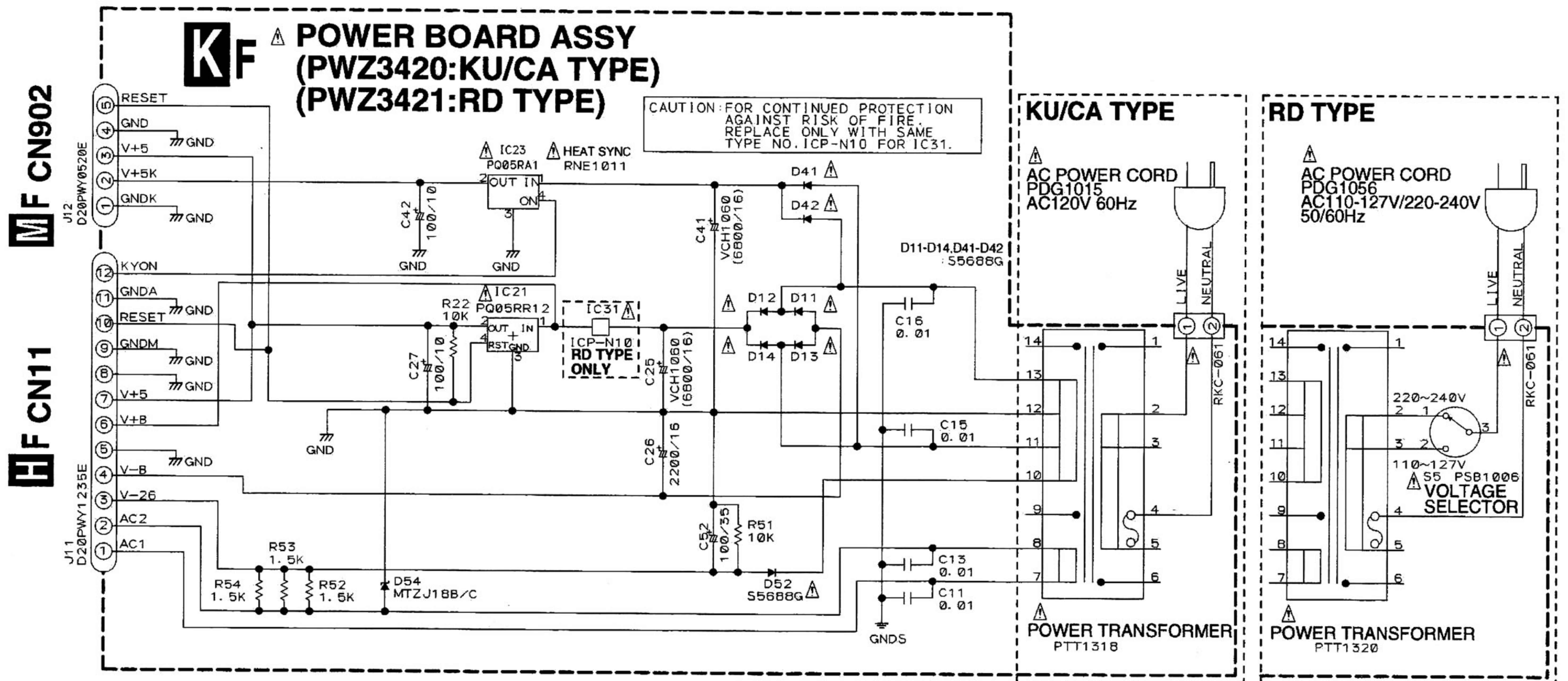


B F C D F E F F G F H F

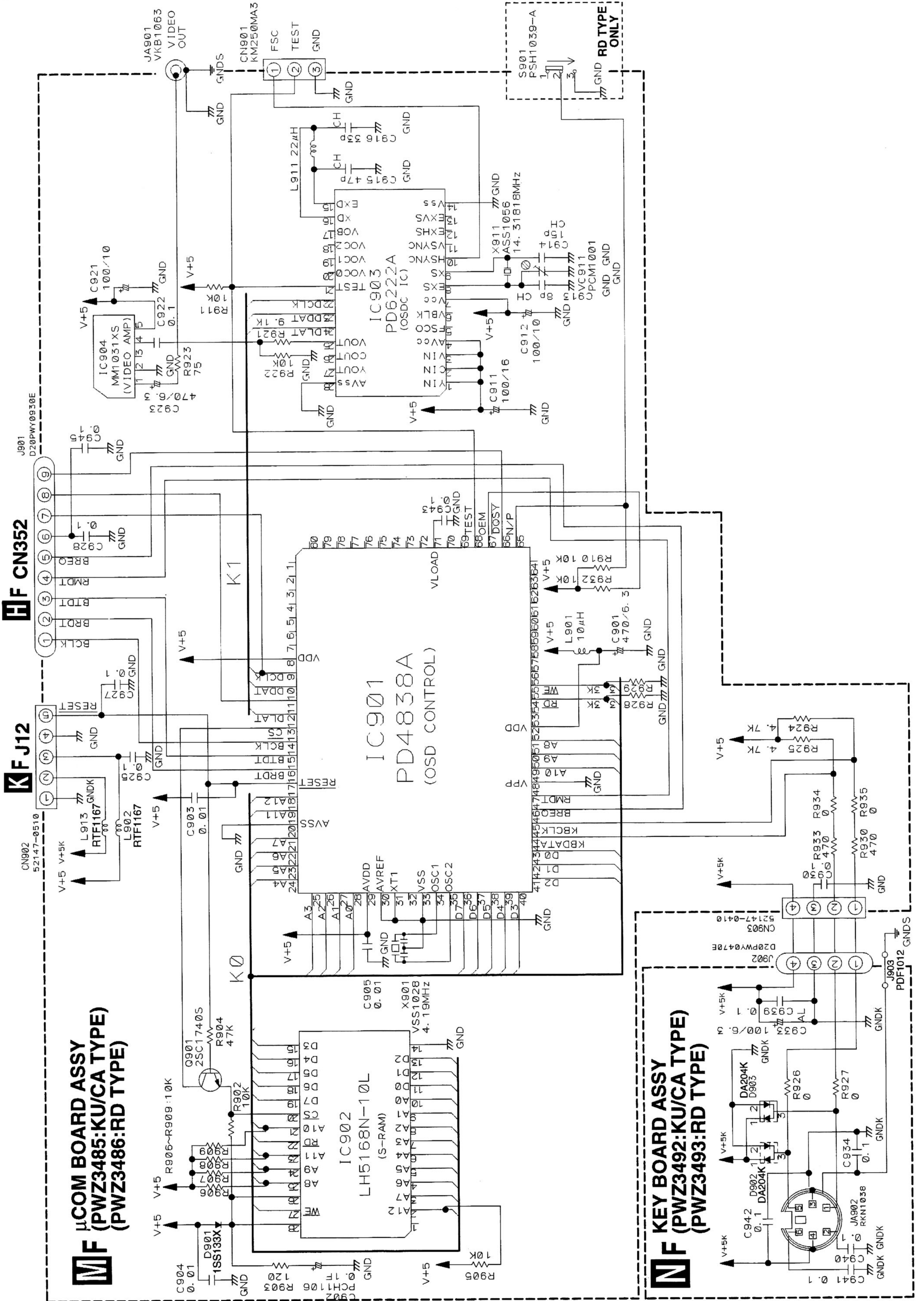
2.2 DISPLAY BOARD ASSY, SWITCH BOARD ASSY AND POWER BOARD ASSY



- | | |
|--------------------|----------------------------|
| DISPLAY BOARD ASSY | SWITCH BOARD ASSY |
| S703: MODE | S751: SINGLE LOADER ACCESS |
| S704: UNLOAD | S752: SINGLE LOADER PLAY |
| S707: ▷/◁ | S753: POWER STADBY/ON |
| S708: OPEN/CLOSE | |
| S709: HI-LITE | |
| S710: □ | |
| S711: ≪≪ | |
| S712: ≫≫ | |
| S713: BEST | |
| S714: PREVIOUS | |
| S715: DISC- | |
| S716: DISC+ | |
| S717: CLEAR | |
| S718: PROGRAM | |
| S719: RANDOM | |
| S720: REPEAT | |



2.3 μCOM BOARD ASSY AND KEY BOARD ASSY



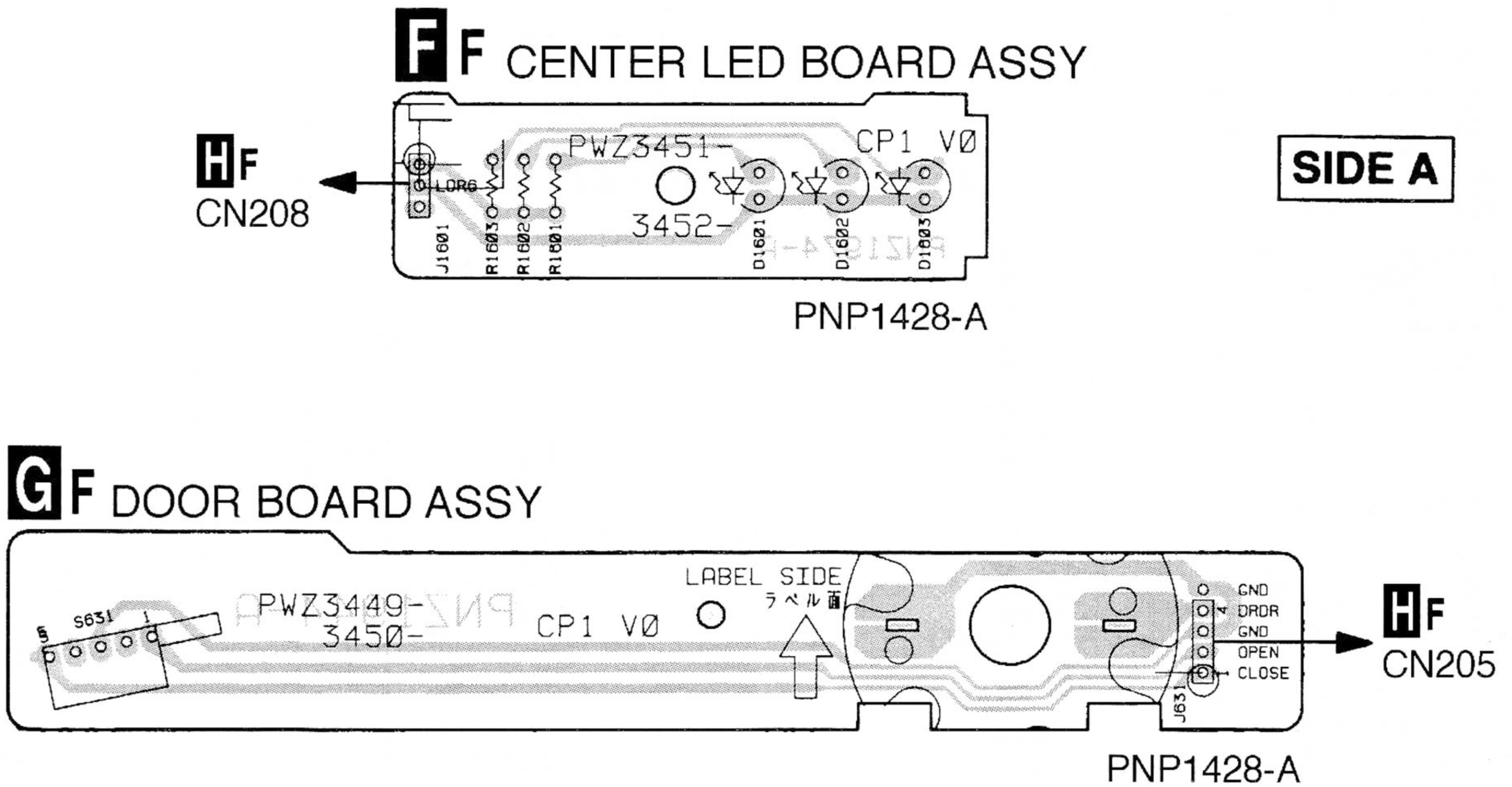
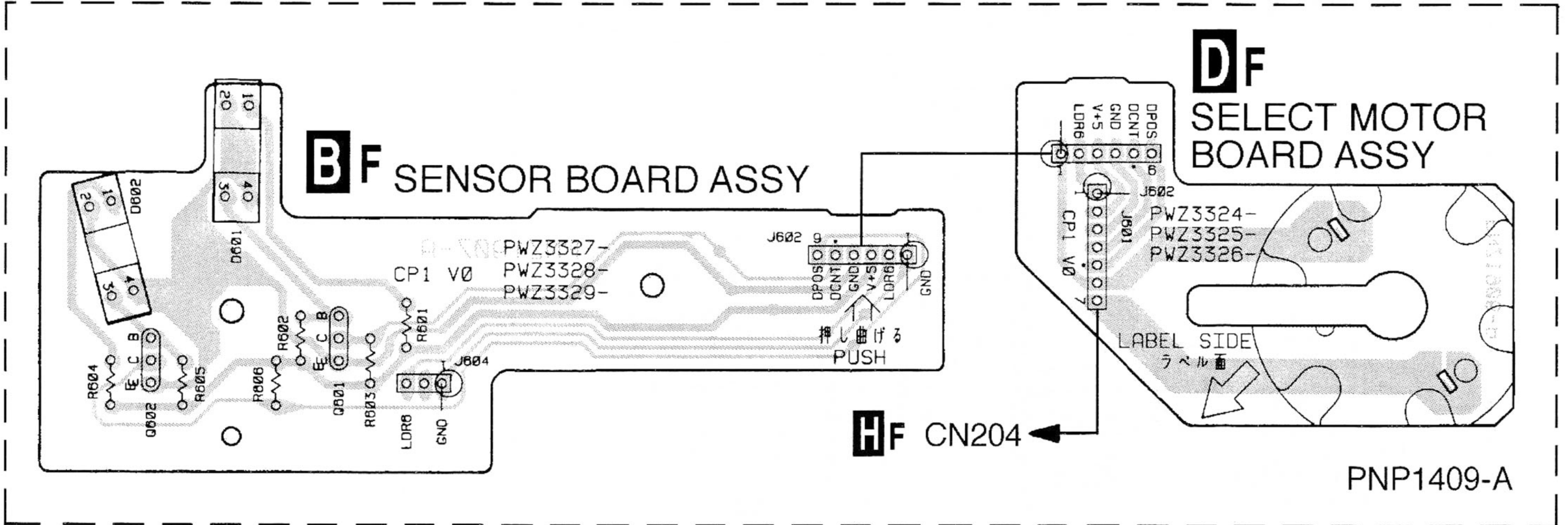
M F μCOM BOARD ASSY
 (PWZ3485:KU/CA TYPE)
 (PWZ3486:RD TYPE)

N F KEY BOARD ASSY
 (PWZ3492:KU/CA TYPE)
 (PWZ3493:RD TYPE)

3. PCB CONNECTION DIAGRAM

3.1 SENSOR BOARD ASSY, SELECT MOTOR BOARD ASSY, CENTER LED BOARD ASSY, DOOR BOARD ASSY AND HEADPHONE BOARD ASSY

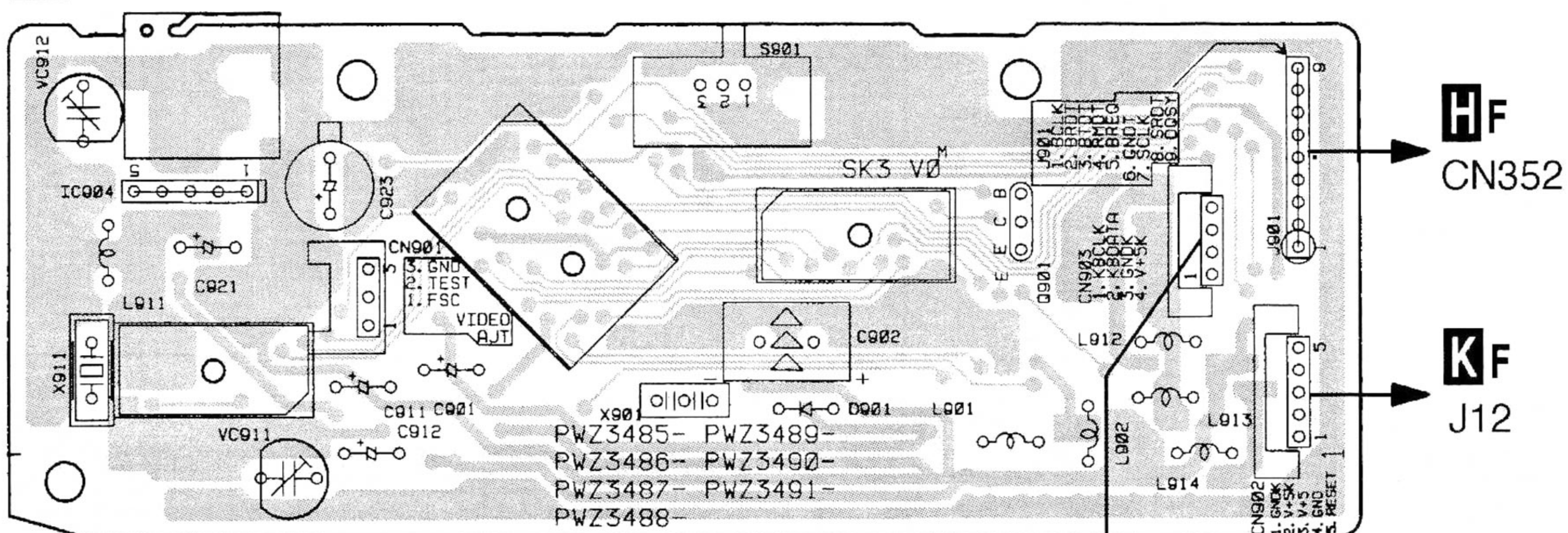
SELECT MECHA BOARD ASSY



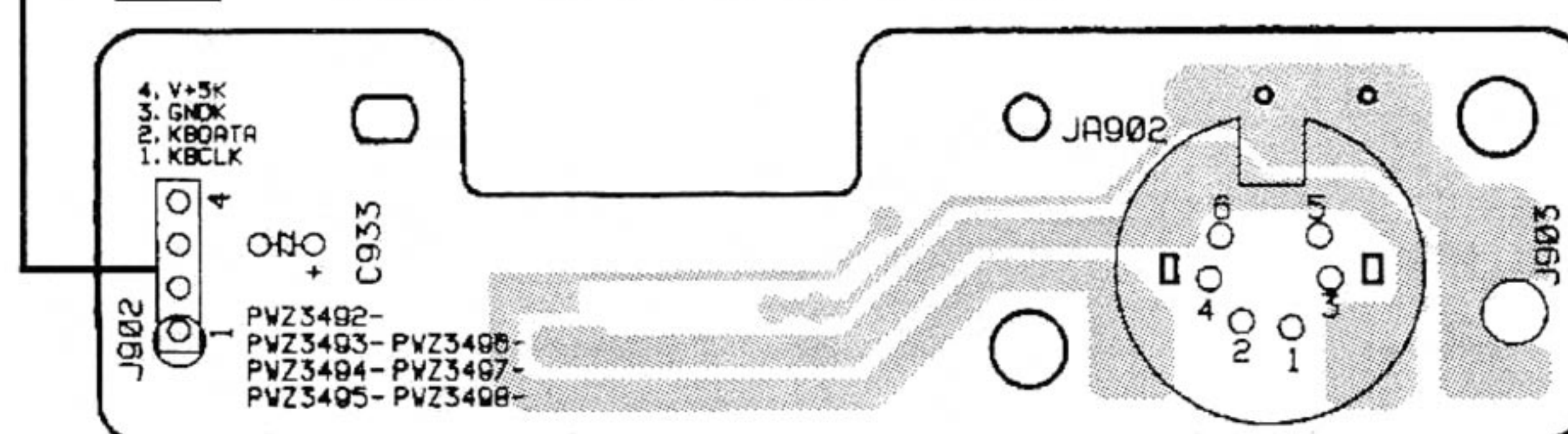
3.2 μ COM BOARD ASSY AND KEY BOARD ASSY

MF μ COM BOARD ASSY

SIDE A

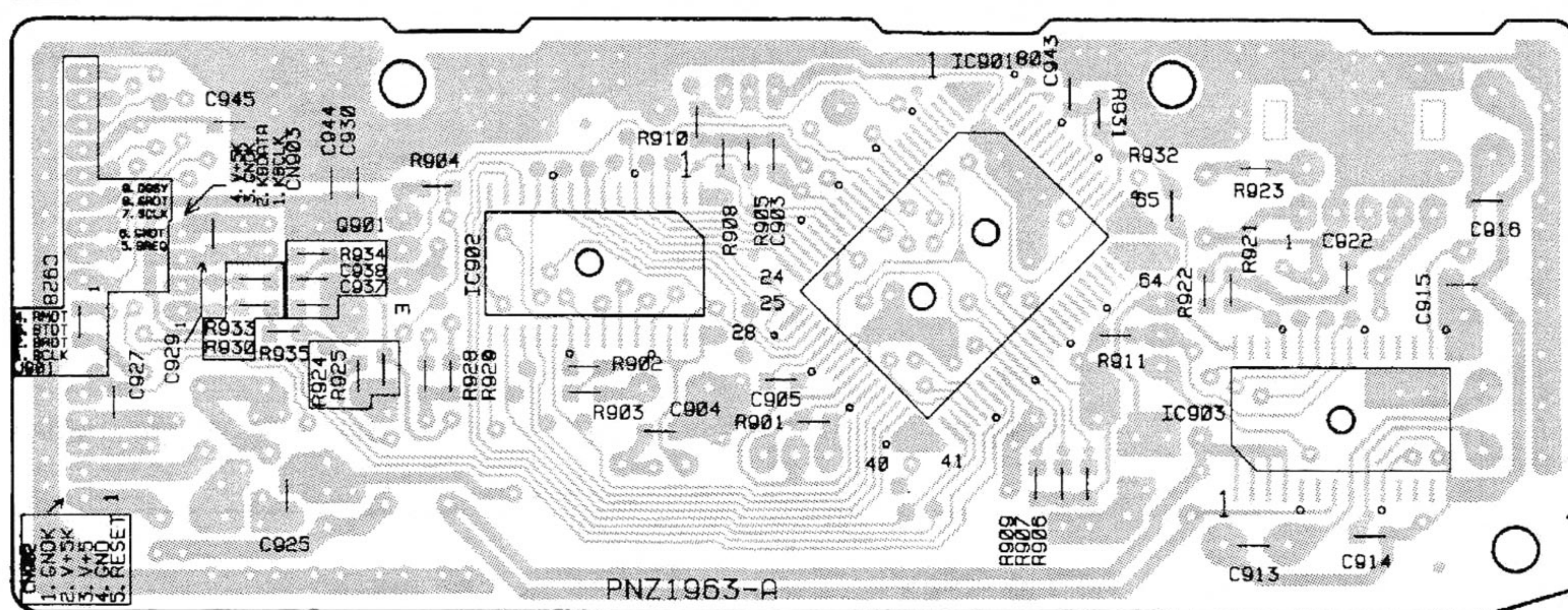


NF KEY BOARD ASSY

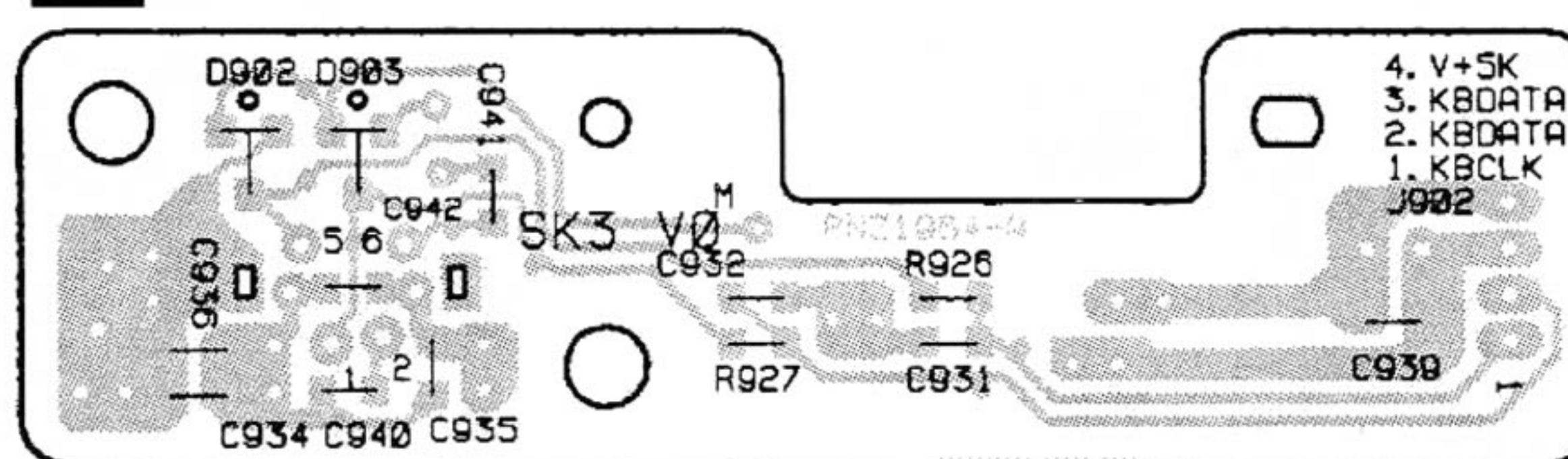


MF μ COM BOARD ASSY

SIDE B



NF KEY BOARD ASSY

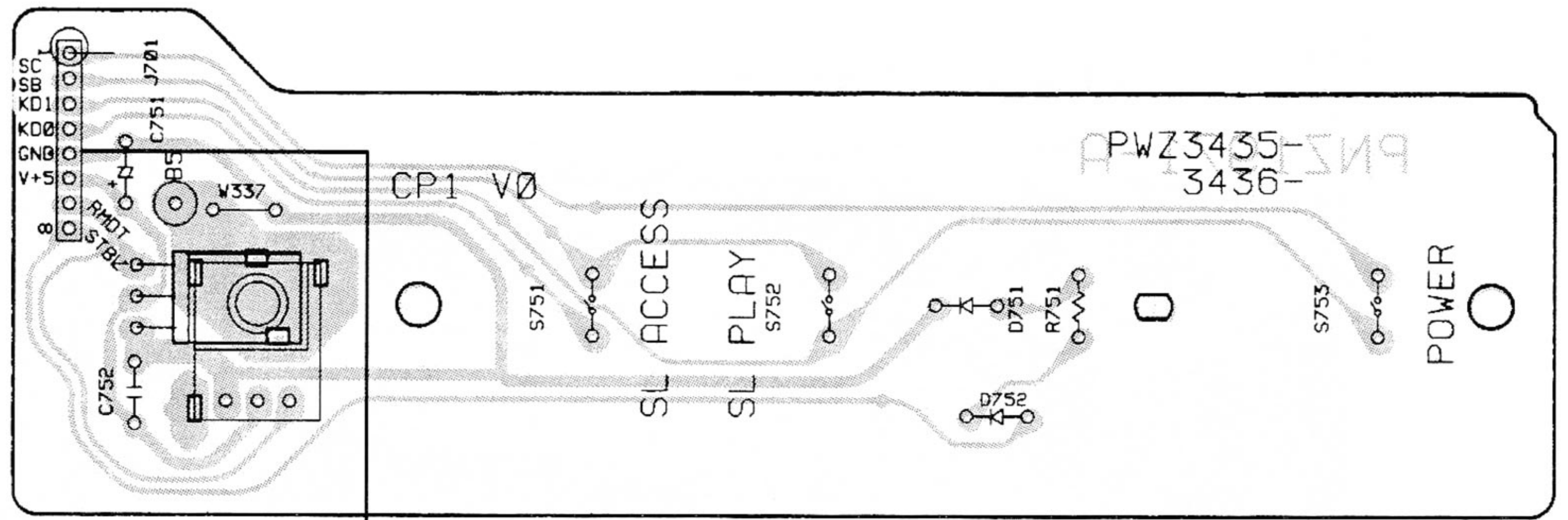


PNP1422-A

3.3 DISPLAY BOARD ASSY, SWITCH BOARD ASSY AND POWER BOARD ASSY

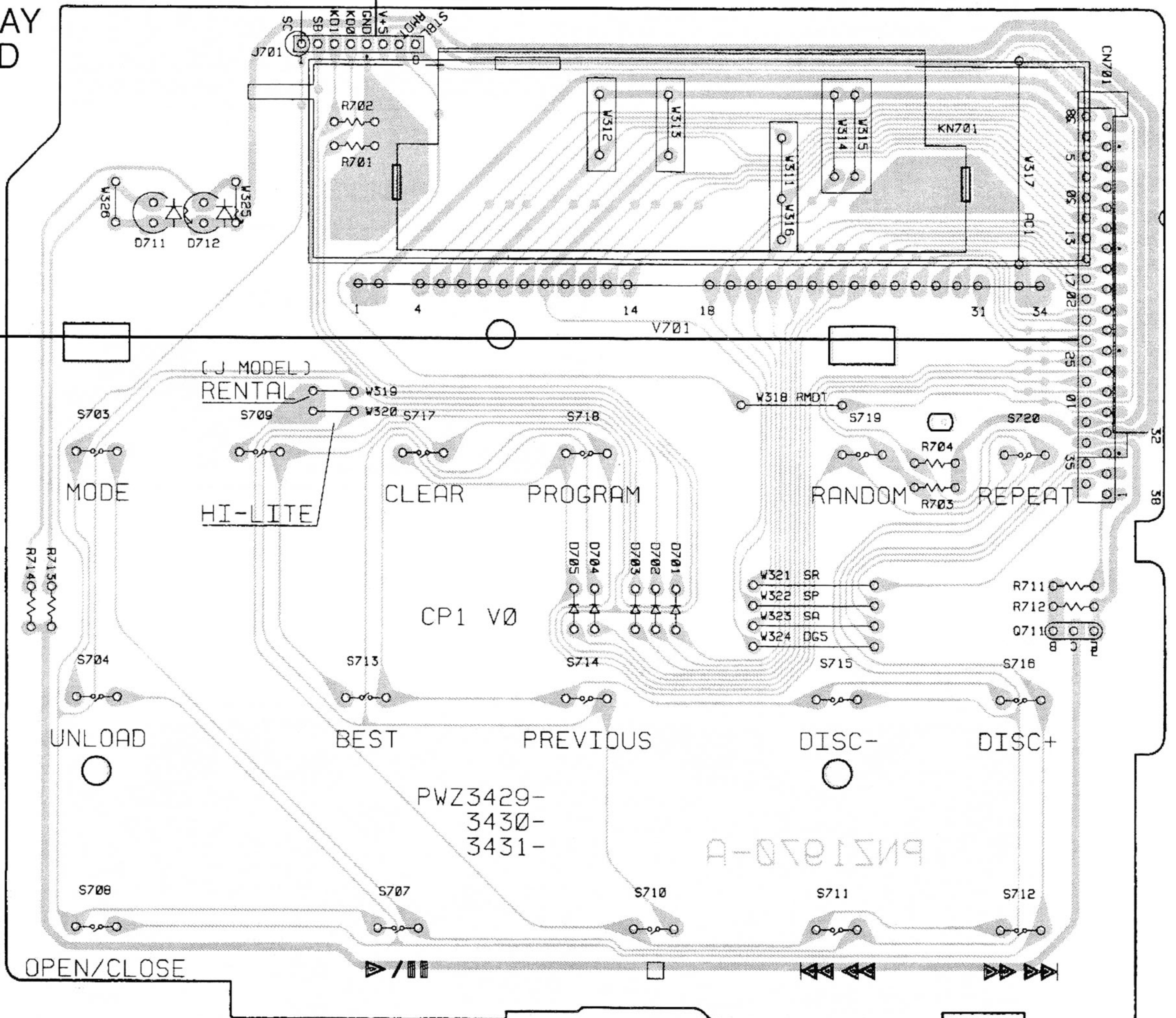
JF SWITCH BOARD ASSY

SIDE A



IF DISPLAY BOARD ASSY

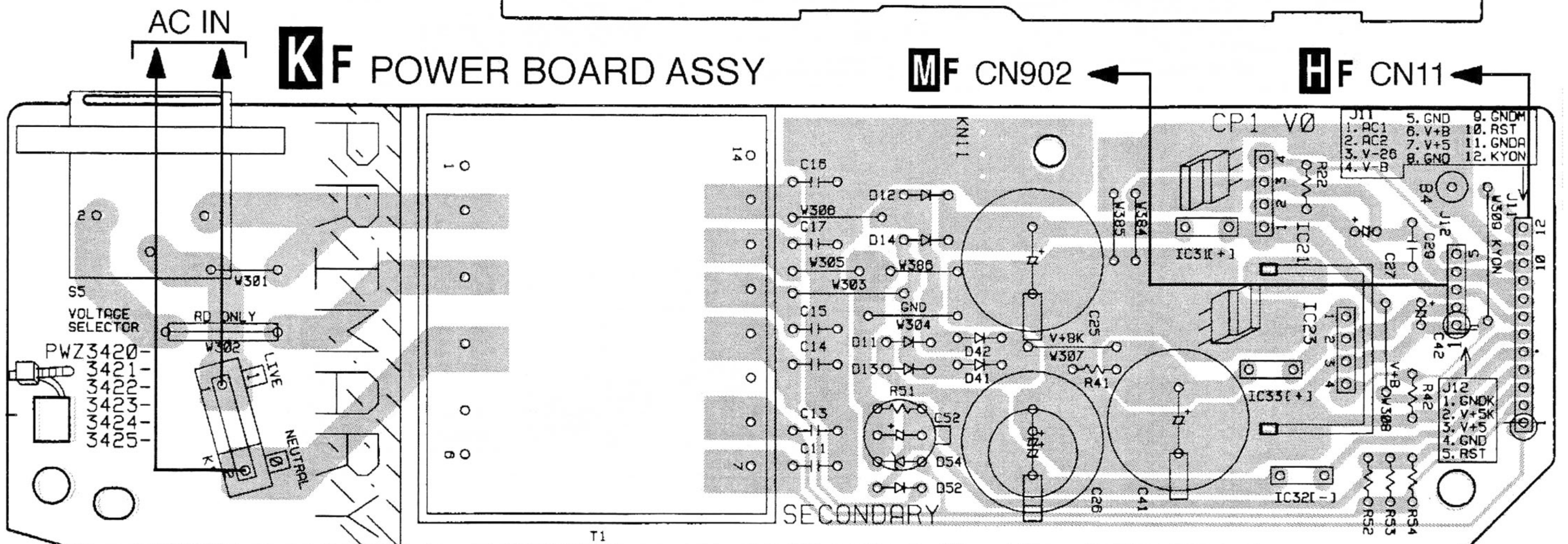
HF CN351



KF POWER BOARD ASSY

MF CN902

HF CN11

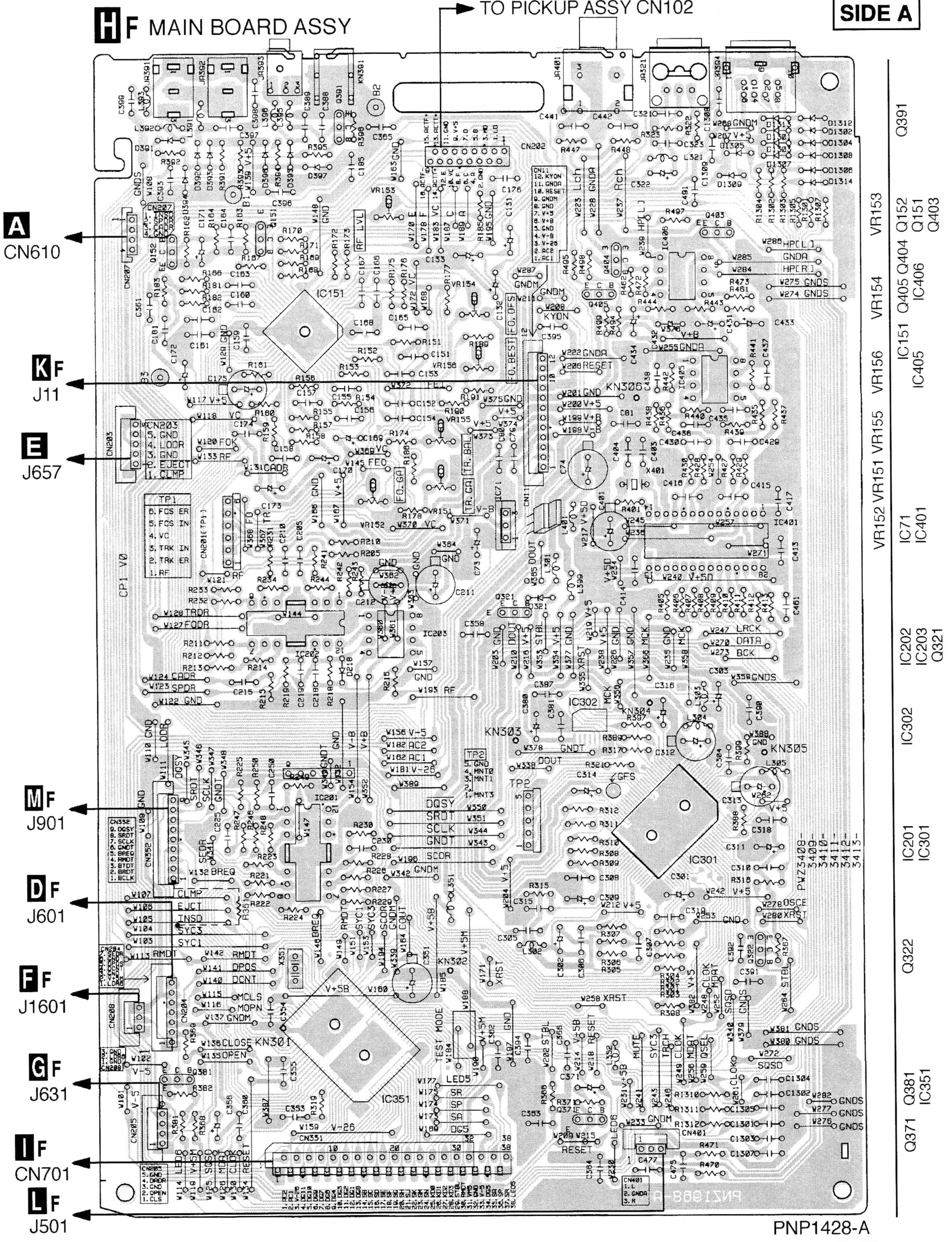


PNP1428-A

3.4 MAIN BOARD ASSY

MAIN BOARD ASSY

SIDE A



- Q391
- Q152
- Q151
- Q403
- Q404
- Q405
- Q406
- VR153
- VR154
- VR155
- VR156
- VR152
- VR151
- IC151
- IC405
- IC406
- IC71
- IC401
- IC202
- IC203
- Q321
- IC302
- IC301
- IC201
- IC301
- Q322
- Q371
- Q381
- IC351

PNP1428-A

4. ADJUSTMENTS

■ CHROMA FREQUENCY ADJUSTMENT

Symptom when out of adjustment:

The TV picture is not in color (Black-and-white picture).

Procedure

1. Short-circuit pin 2 and pin 3 of connector CN901 of the μ COM BOARD ASSY.
2. Connect a frequency counter to pin 1 of CN901.
Adjust VC911 so that the frequency is within 3.579545 MHz \pm 5 Hz.

