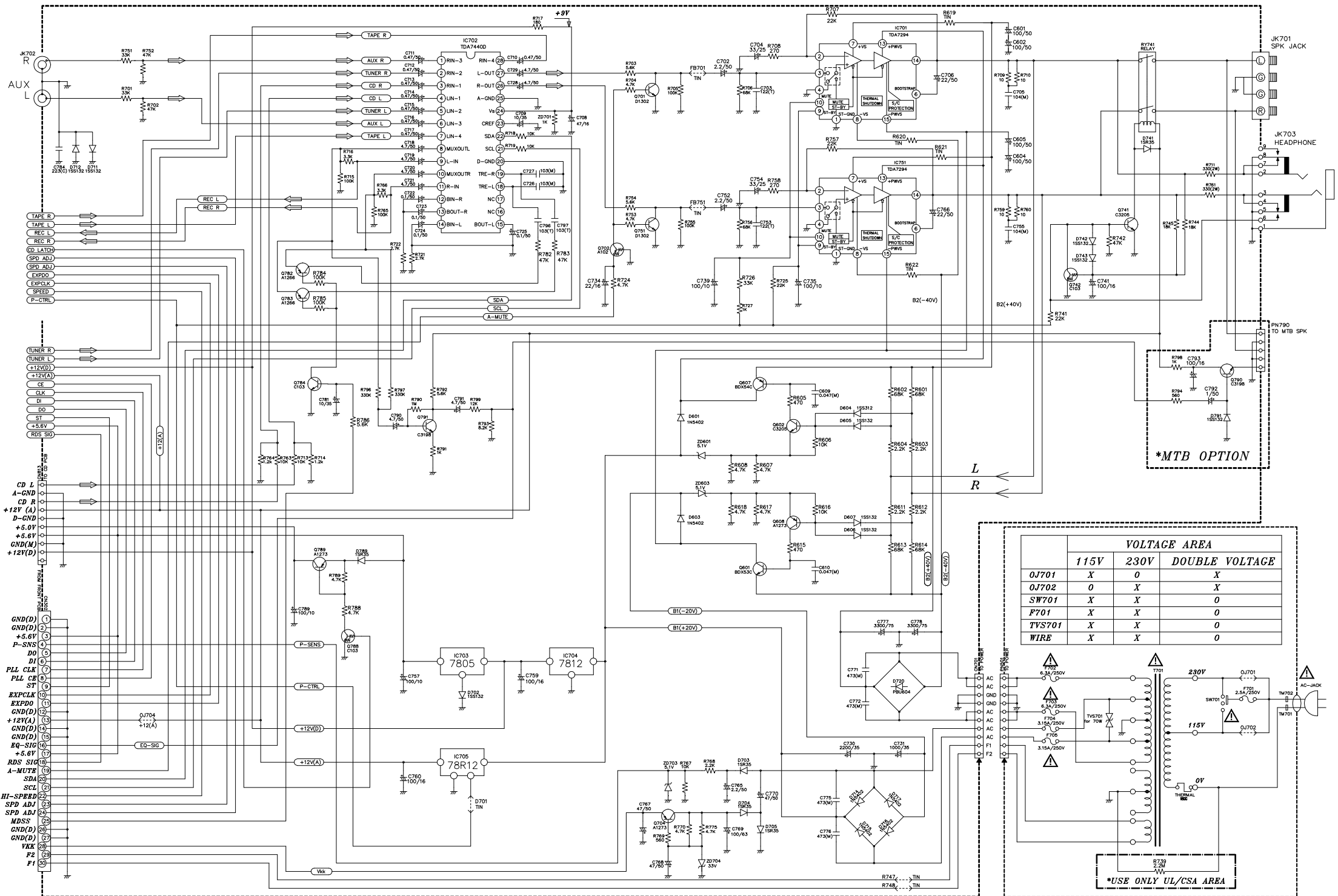
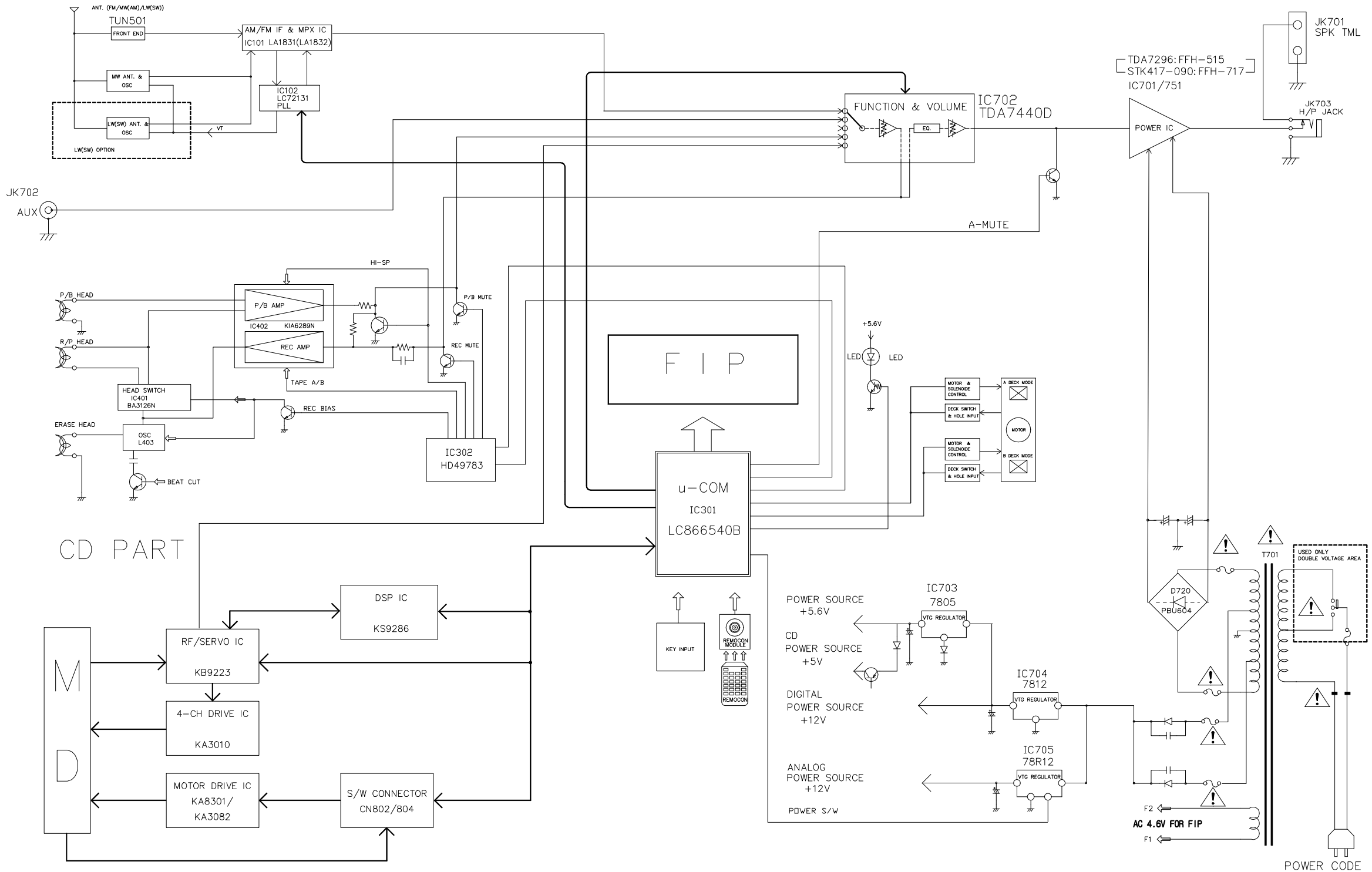
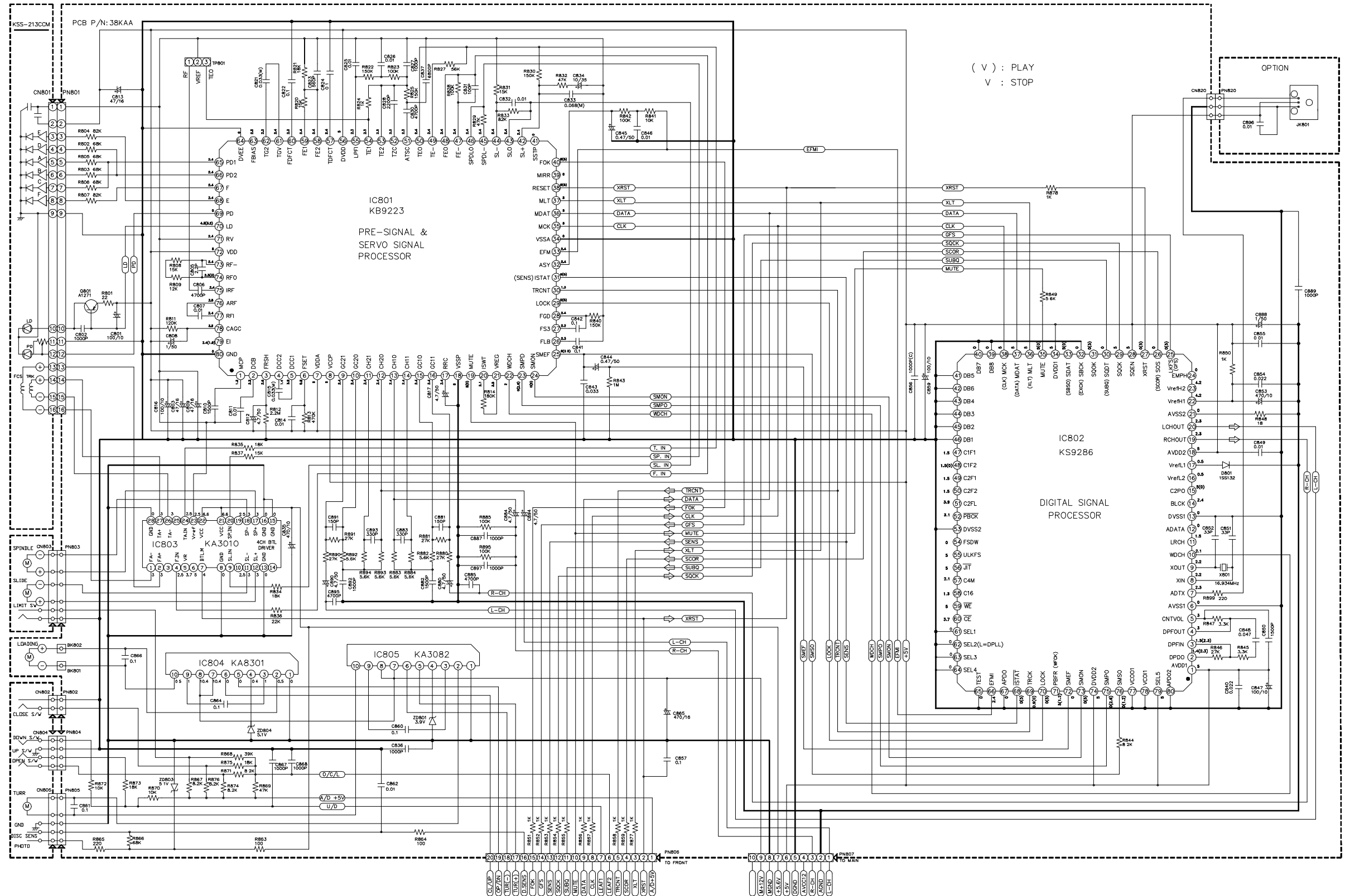


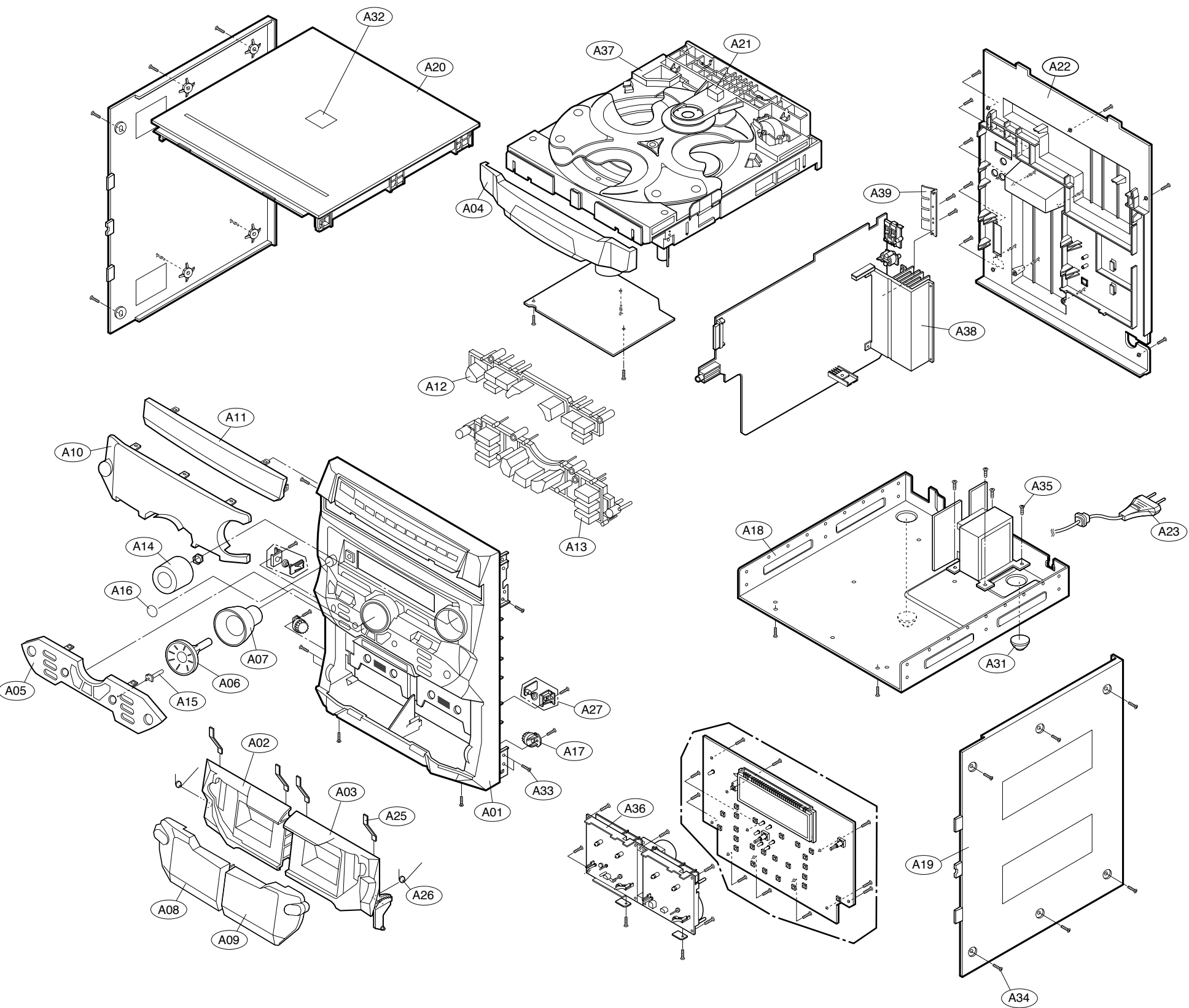






EXPLODED VIEW/PARTS LIST

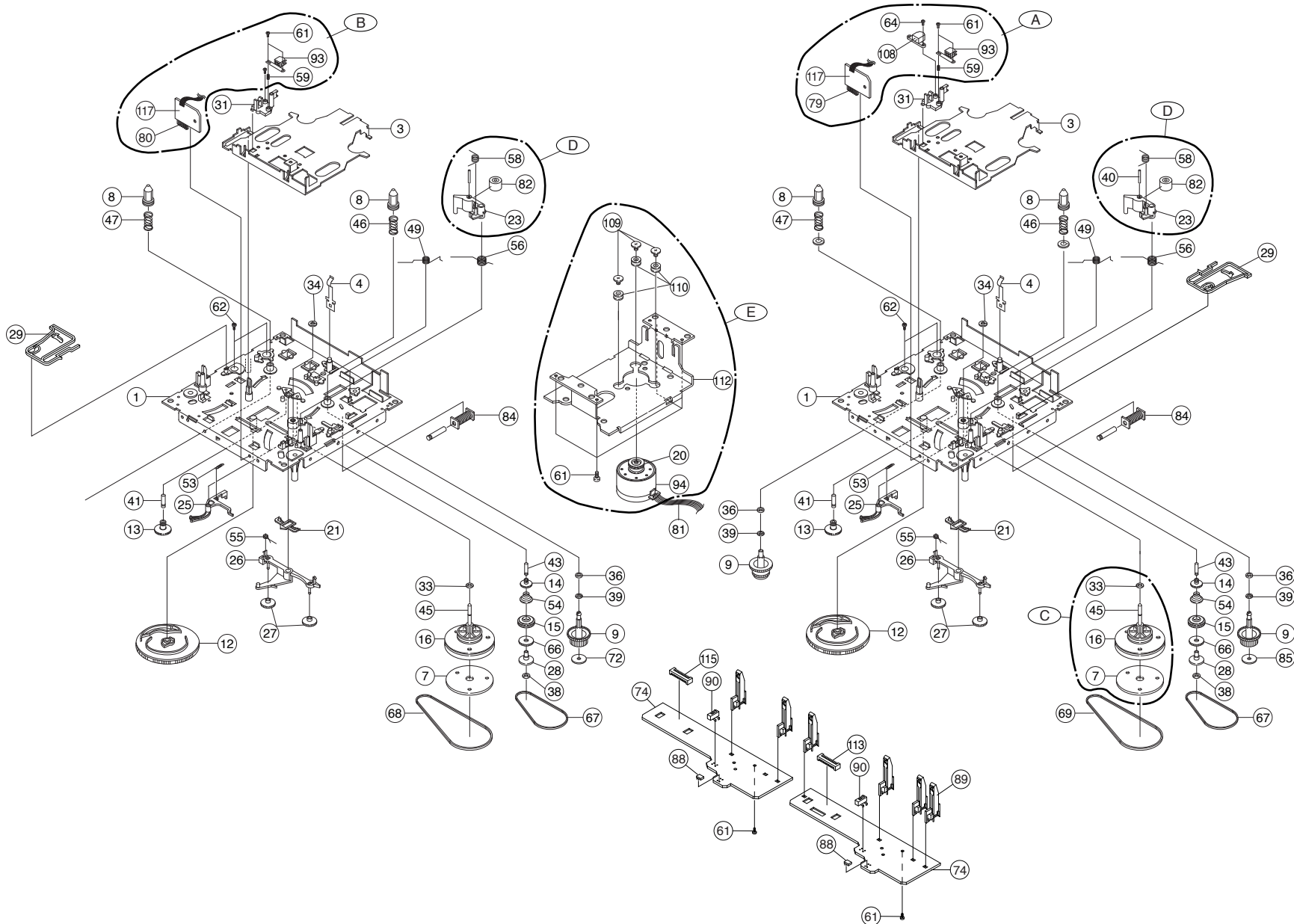
CABINET



S	LOCA.NO.	PART NO.(GS)	DESCRIPTION	SPECIFICATION	V C
	A01	3720SCM038A(*)	PANEL	FRONT	HZ
	A02	3580SCA346A	DOOR	CST LEFT	HZ
	A01	3720SCM038A	PANEL	FRONT	HZ
	A02	3580SCA346A	DOOR	CST	HZ
	A03	3580SCA347A	DOOR	CST RIGHT	HZ
	A04	3580SCC878B	DOOR	CD	HZ
	A05	3550SC0008C	COVER	FRONT	HZ
	A06	4940SC0053A	KNOB	JO	HZ
	A07	3680SC0004A	LENS	JO	HZ
	A08	3790SCM056C(*)	WINDOW	CST-L(FOR FFH-717)	HZ
		3790SCM056E(*)	WINDOW	CST-L(FOR FFH-818)	HZ
	A09	3790SCM057A	WINDOW	CST-R	HZ
	A10	3790SCM058A	WINDOW	AMP	HZ
	A11	3790SCM059A	WINDOW	CD	HZ
	A12	4940SC0051A	KNOB	TUNING	HZ
	A13	4940SC0052B	KNOB	PLAY & FUNC	HZ
	A14	4940SC0055A	KNOB	VOL	HZ
	A15	3680SC0005A	LENS	SET	HZ
	A16	3508SB0001A	DECORATION	HIT-TONE	
	A17	4901SK0001C	DAMPER ASSY		HZ
	A18	3140S-P907A	CHASSIS	MAIN	HZ
	A19	3720S-0036D	PANEL	SIDE	HZ
	A20	3090S-0003F	CABINET	TOP	HZ
	A21	447-938K	CUSHION	CUSHION RUBBER(MTR-400/50)	HZ
	A22	3720SCM409A(*)	PANEL	BACK(FOR FFH-717)	HZ
		3720SCM043A(*)	PANEL	BACK(FOR FFH-818)	HZ
	A23	3410SCE200A	POWER CORD	CE-503PLUG CHAUS CE 2000M	HZ
	A24	332N218E	COIL, ANTENNA	KS951212-01 KWANGSUNG	HZ
	A25	442-577B	SPRING	SPRING CST-PACK(H=7.5)	
	A26	442-085A	SPRING	SPRING-DOOR	
	A27	384-535A	GUIDE	EJECT AY	
	A28	4930S-0536A	HOLDER	HOLDER GUIDE	
	A29	442-780A	SPRING		
	A30	384-014A	GUIDE	EJECTOR	
	A31	265-013B	FOOT	RUBBER(NBR)	
	A32	246-444K	DECORATION	PLATE FFHKL588V SILVER	HZ
	A33	353-025T	SCREW	TAPTITE 3X10.5 FZMY	HZ
	A34	353-025C	SCREW	TAPTITE 3X10 FBK	HZ
	A35	1TRL0402418	BRAIZER HEAD TA	D 4.0 L 8.0 MSWR3/FZY	HZ
	A36	6730S-G005B	DECK MECHANISM	ADR2400FF SAMSUNG	HZ
	A37	4405SCE002A	MECHANISM ASSY	CDM-H1303 SHIN HEUNG CD	HZ
	A38	4920S-E007A	HEAT SINK	MAIN	HZ
	A39	4810S-0901A	BRACKET	IC	HZ

f U/C Shows the origin of local parts(HZ:LGEHZ)
f U : Refer to the SPPL (Service Parts Price List).

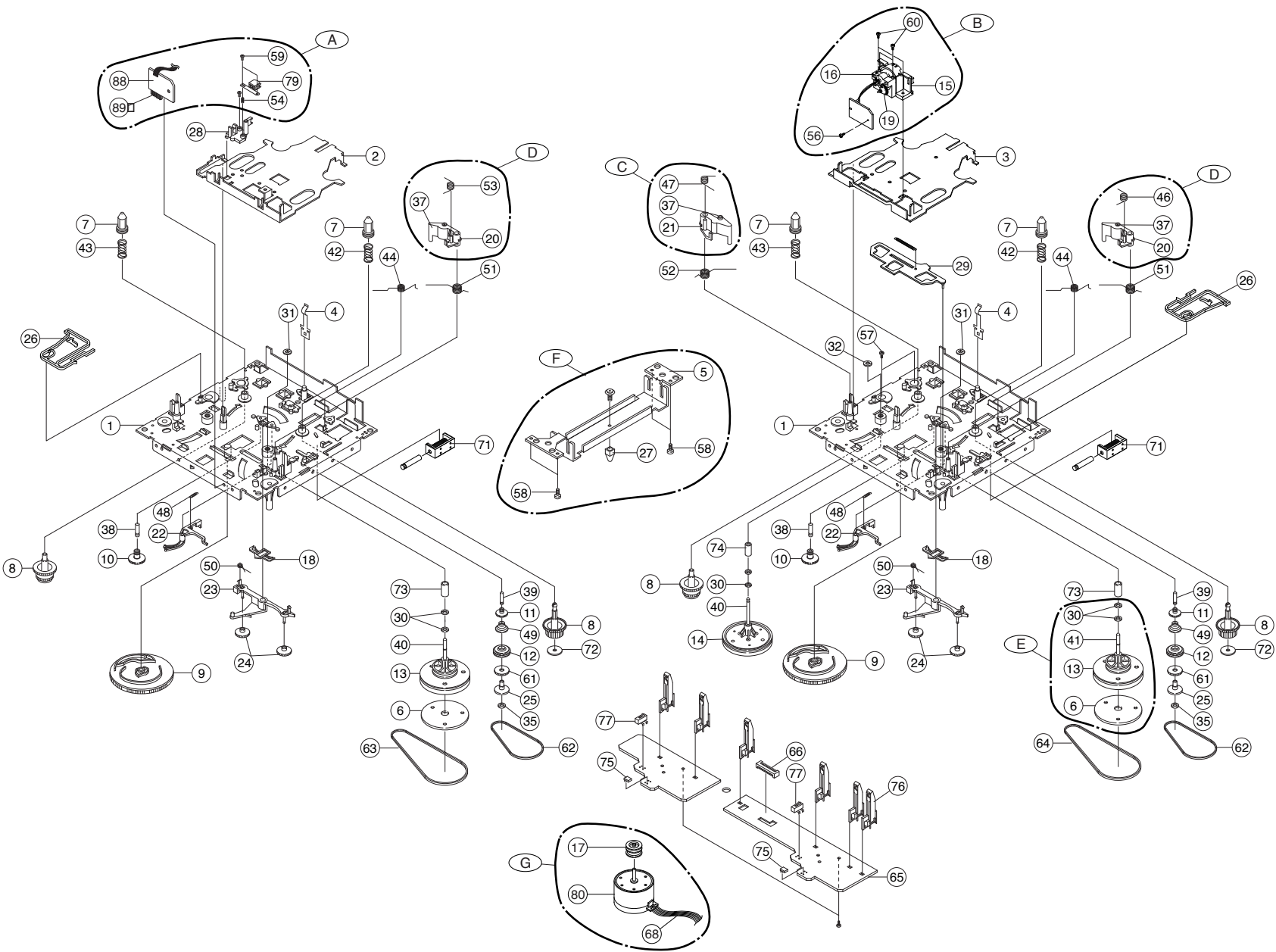
TAPE DECK MECHANISM:AUTO STOP DECK(OPTIONAL)



NSP: Not Serviceable Part

REF.NO.	PART NAME	PART NO.	Q'TY	REF.NO.	PART NAME	PART NO.	Q'TY
-	DECK MECHANISM	6730S-G005B		62	(MOTOR)PH M2 6fN5	NSP	0
1	CHASSIS MAIN	NSP	2	63	(BAKT)Tapping M26fN4	NSP	0
2	BASE HEAD C	NSP	0	64	S/C AZIMUTH(M2fN8)	NSP	2
3	BASE HEAD D	NSP	2	65	(AZIMUTH)M2fN5.7	NSP	0
4	PLATE SPRING	NSP	2	66	FELT C	NSP	2
5	BARK MOTOR 110	NSP	0	67	BELT SUB(34.7)	NSP	2
6	BARK MOTOR 128	NSP	0	68	BELT 110 54.3	6768SCBS03B	1
7	PLATE PLYWHEEL F	NSP	2	69	BELT 110 76.2	6768SCBS03C	1
8	CHIP REEL	NSP	4	70	BELT 128 54.3	NSP	0
9	BASE REEL	NSP	4	71	BELT 128 80.8	NSP	0
10	BRACKET HEAD	NSP	0	72	BELT SR 66.3	NSP	0
11	GEAR HEAD C	NSP	0	73	BELT TR 66.3	NSP	0
12	GEAR CAM	NSP	2	74	PCB CTRL SINGLE	NSP	2
13	GEAR IDLER	NSP	2	75	PCB CTRL DOUBLE	NSP	0
14	BUSH C	NSP	2	76	CONN R/P(16P)	NSP	0
15	PULLEY C	NSP	2	77	CONN R/P(13P)	NSP	0
16	PULLEY F/W F	NSP	2	78	CONN PB(10P)	NSP	0
17	PULLER F/W R	NSP	0	79	CONN HEAD(6P)	NSP	1
18	BRKT HEAD B	NSP	0	80	CONN HEAD(3P)	NSP	1
19	GEAR HEAD B	NSP	0	81	WIRE MOTOR(4P-80)	NSP	1
20	PULLEY M/T YDW	NSP	1	82	ROLLER PINCH	6768SCRS01A	2
21	LEVER BRAKE	NSP	2	83	WEDGE	NSP	2
22	GEAR DIR	NSP	0	84	SOLENOID(24)	6768SCVS02A	2
23	ARM PINCH F	6768SCAS03A	2	85	REFLECTOR	NSP	2
24	ARM PINCH R	NSP	0	86	METAL FG F(CAPS)	NSP	2
25	ARM CAM LOCK	NSP	2	87	METAL FG R(CAPS)	NSP	0
26	ARM RF	NSP	2	88	PHOTO SENSOR	NSP	2
27	GEAR RF	NSP	4	89	SETECT(MXS00220)	NSP	5
28	CAP C	NSP	2	90	SWITCH MODE	6768SCTS01B	2
29	LEVER EJECT	6768SCDS03A	2	91	HEAD R/P	NSP	0
30	GUIDE MOTOR	NSP	0	92	HEAD P/B	NSP	0
31	TAPE GUIDE	NSP	2	93	HEAD 1-WAY	6768SCHS01A	2
32	LEVER AC	NSP	0	94	MOTOR(YD2BH)	6768SCQS01A	1
33	W/S(2.3fN8.5fN0.25)	NSP	2	95	WIRE HEAD(BRN)	NSP	0
34	W/S(1.8fN4fN0.5)	NSP	2	96	WIRE HEAD(BLU)	NSP	0
35	W/S(1.6fN8.5fN0.5)	NSP	0	97	WIRE HEAD(GRN0)	NSP	0
36	W/S(3.6fN6fN0.5)	NSP	4	98	WIRE HEAD(ORA)	NSP	0
37	W/S(6fN1fN0.25)	NSP	0	99	WIRE HEAD(RED)	NSP	0
38	W/S(1.2fN8.2fN0.25)	NSP	2	100	WIRE HEAD(WHT)	NSP	0
39	W/S(4.6fN1fN0.13)	NSP	4	101	WIRE HEAD(YEL)	NSP	0
40	SHAFT PINCH	NSP	2	102			
41	SHAFT IDLER	NSP	2	103			
42	PIN AZIMUTH	NSP	0	104	DIODE	NSP	2
43	SHAFT RF	NSP	2	105	RESISTOR	NSP	2
44	SHAFT F/W R	NSP	0	106	SHAFT SUB	NSP	0
45	SHAFT F/W F	NSP	2	107	M/T GUIDE	NSP	0
46	S/P B.T(F)	NSP	2	108	HEAD ERASE	6768SCHS03A	1
47	S/P B.T(R)	NSP	2	109	(M/T)MACH M2.6 4	NSP	3
48	S/P LEVER AC	NSP	0	110	CUSHION MOTOR	NSP	3
49	S/P BASE HEAD	NSP	2	111	BRKT MOTOR D2	NSP	0
50	S/P DIR	NSP	0	112	BRKT MOTOR D1	NSP	1
51	S/P PINCH(F)	6768SCSS02A	0	113	CONN R/P(12P)	NSP	1
52	S/P PINCH(R)	NSP	0	114	CONN R/P(11P)	NSP	0
53	S/P ARM CAM LOCK	NSP	2	115	CONN PB(8P)	NSP	1
54	S/P C	NSP	2	116	PH M2 9(E-HEAD)	NSP	1
55	S/P ARM RF	NSP	2	117	PCB HEAD	NSP	2
56	S/P P/R(F)	NSP	2	E	HEAD ASSY RP5	6768SCES03A	
57	S/P P/R(R)	NSP	0	E	HEAD ASSY RP6	6768SCES03B	
58	S/P PINCH 1-WAY	NSP	2	E	Pulley F/W F ASSY	6268SCJS02A	
59	S/P AZIMUTH	NSP	2	E	ARM Pinch F ASSY	6768SCAS01B	
60	(HEAD)PH M1 6fN8	NSP	0	E	MOTOR ASSY	6768SCOS01A	
61	(NORMAL)BH M2fN4	NSP	6				

TAPE DECK MECHANISM:AUTO REVERSE DECK(OPTIONAL)

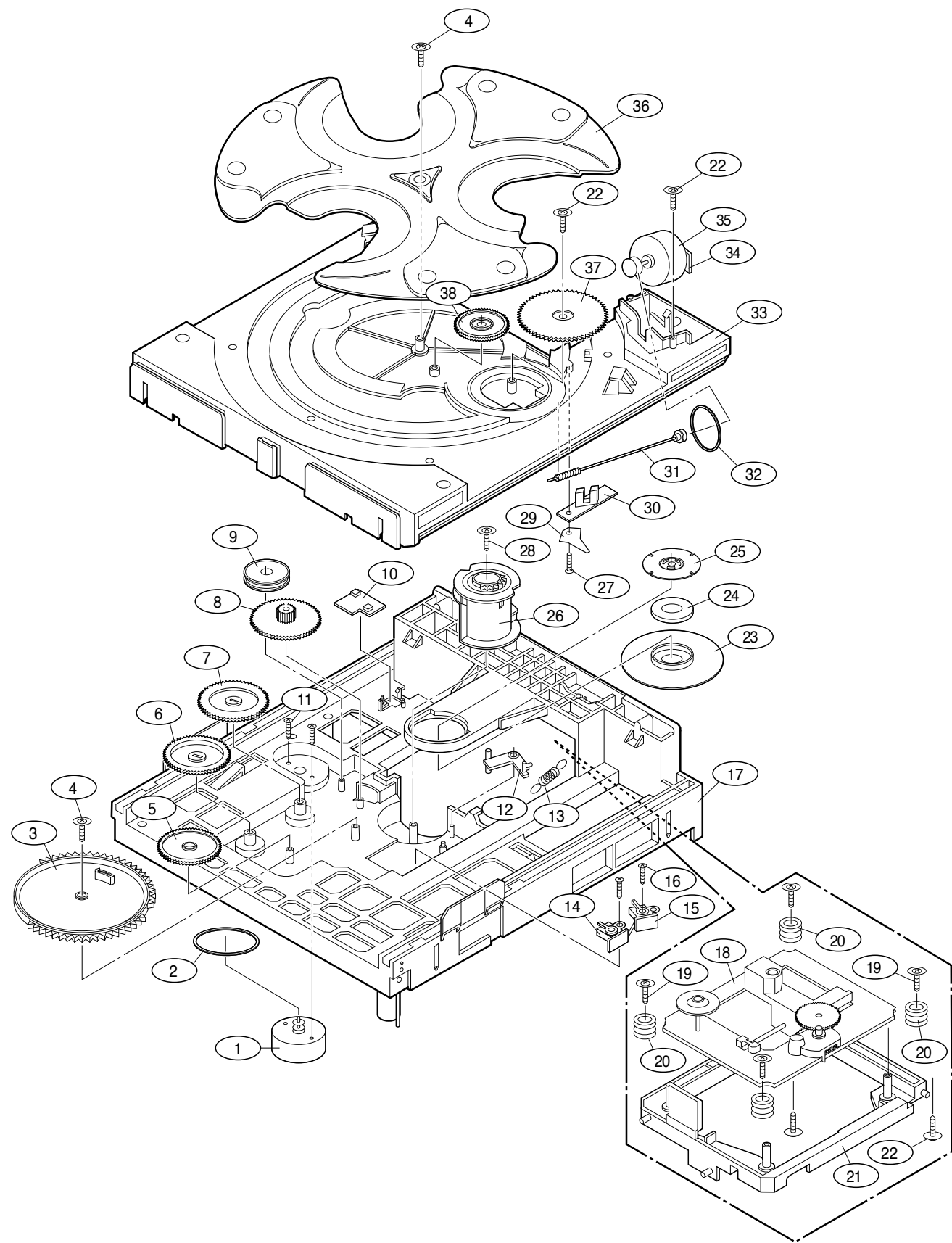


NSP: Not Serviceable Part

REF.NO.	PART NAME	PART NO.	Q'TY	REF.NO.	PART NAME	PART NO.	Q'TY
-	DECK MECHANISM	6730S-G005A		49	SPRING C	NSP	2
1	CHASSIS MAIN	NSP	2	50	SPRING ARM RF	NSP	2
2	BASE HEAD C	NSP	1	51	SPRING P/RETURE(F)	NSP	2
3	BASE HEAD D	NSP	1	52	SPRING P/RETURN(R)	NSP	1
4	PLATE SPRING	NSP	2	53	SPRING PINCH 1-WAY	NSP	1
5	BRKT MOTOR 110	NSP	1	54	SPRING AZIMUTH	NSP	1
6	PLATE FLYWHEEL F	NSP	2	55	PH M1.6*8	NSP	2
7	CHIP REEL	NSP	4	56	BH M2*4	NSP	4
8	BASE REEL	NSP	4	57	PH M2.6*5	NSP	2
9	GEAR CAM	NSP	2	58	TAPPING M2.6*4	NSP	4
10	GEAR IDLER	NSP	2	59	AZIMUTH S/C 1-WAY	NSP	1
11	BUSH C	NSP	2	60	AZIMUTH S/C M2*5.7	NSP	2
12	PULLEY C	NSP	2	61	FELT C	NSP	2
13	PULLEY F/W F	NSP	2	62	BELT SUB(PI33.1)	NSP	2
14	PULLEY F/W R	NSP	1	63	BELT 110	NSP	1
15	BRKT HEAD B	NSP	1	64	BELT 110	NSP	1
16	GEAR HEAD B	NSP	1	65	PCB CONTROL DOUBL	NSP	1
17	PULLEY M/T TDW	NSP	1	66	CONNECTOR(16P)	NSP	1
18	LEVER BRAKE	NSP	2	67	CONNECTOR(6P)	NSP	1
19	GEAR DIR	NSP	1	68	WIRE MOTOR(4P-80)	NSP	1
20	ARM PINCH F	6768SCAS03A	2	69	ROLLER PINCH	6768SCRS01A	3
21	ARM PINCH R	6768SCAS04A	1	70	WEDGE(" ")	NSP	1
22	ARM CAMLOCK	NSP	2	71	SOLENOID(24 OHM)	6768SCVS02A	2
23	ARM RF	NSP	2	72	REFLECTOR	NSP	2
24	GEAR RF	NSP	4	73	METAL FG F(CAPSTAN)	NSP	2
25	CAP C	NSP	1	74	METAL FG R(CAPSTAN)	NSP	1
26	LEVER EJECT	6768SCDS03A	2	75	PHOTO SENSOR	NSP	2
27	GUIDE MOTOR	NSP	1	76	SWITCH DETECT	NSP	6
28	TAPE GUIDE	NSP	1	77	SWITCH MODE	6768SCTS01B	2
29	LEVER AC	NSP	1	78	HEAD R/P	NSP	1
30	W/S(2.3*3.5*0.25)	NSP	3	79	HEAD 1-WAY	NSP	1
31	W/S(1.8*4*0.5)	NSP	2	80	MOTOR(YD2BH)	6768SCQS01A	1
32	W/S(1.6*3.5*0.5)	NSP	1	81	WIRE HEAD(BRN)	NSP	1
33	W/S(3.6*6*0.5)	NSP	4	82	WIRE HEAD(BLU)	NSP	1
34	W/S(6*11*0.25)	NSP	4	83	WIRE HEAD(GRN)	NSP	1
35	W/S(1.2*3.2*0.25)	NSP	2	84	WIRE HEAD(ORA)	NSP	1
36	W/S(4.6*7.1*0.13)	NSP	4	85	WIRE HEAD(RED)	NSP	1
37	SHAFT PINCH	NSP	3	86	WIRE HEAD(WHT)	NSP	1
38	SHAFT IDLER	NSP	2	87	WIRE HEAD(YEL)	NSP	1
39	SHAFT RF	NSP	2	88	Head PCB	NSP	1
40	SHAFT F/W R	NSP	1	89	CONN Head(3P)	NSP	1
41	SHAFT F/W F	NSP	2	£	HEAD ASSY RP6	6768SCES03B	
42	SPRING B/T(F)	NSP	2	£	BRK HEAD ASSY RP1	6768SCES04A	
43	SPRING B/T(R)	NSP	2	£	ARM Pinch R ASSY	6768SCAS01A	
44	SPRING BASE HEAD	NSP	2	£	ARM Pinch F ASSY	6768SCAS01B	
44-1	SPRING LEVER AC	NSP	1	£	Pulley F/W F ASSY	6268SCJS02A	
45	SPRING DIR	NSP	1	£	MOTOR BRKT ASSY	6768SCPS01A	
46	SPRING PINCH(F)	6768SCSS02A	1	£	MOTOR ASSY	6768SCOS03A	
47	SPRING PINCH(R)	6768SCSS03A	1				
48	S/P ARM CAM LOCK	NSP	2				

EXPLODED VIEW/PARTS LIST

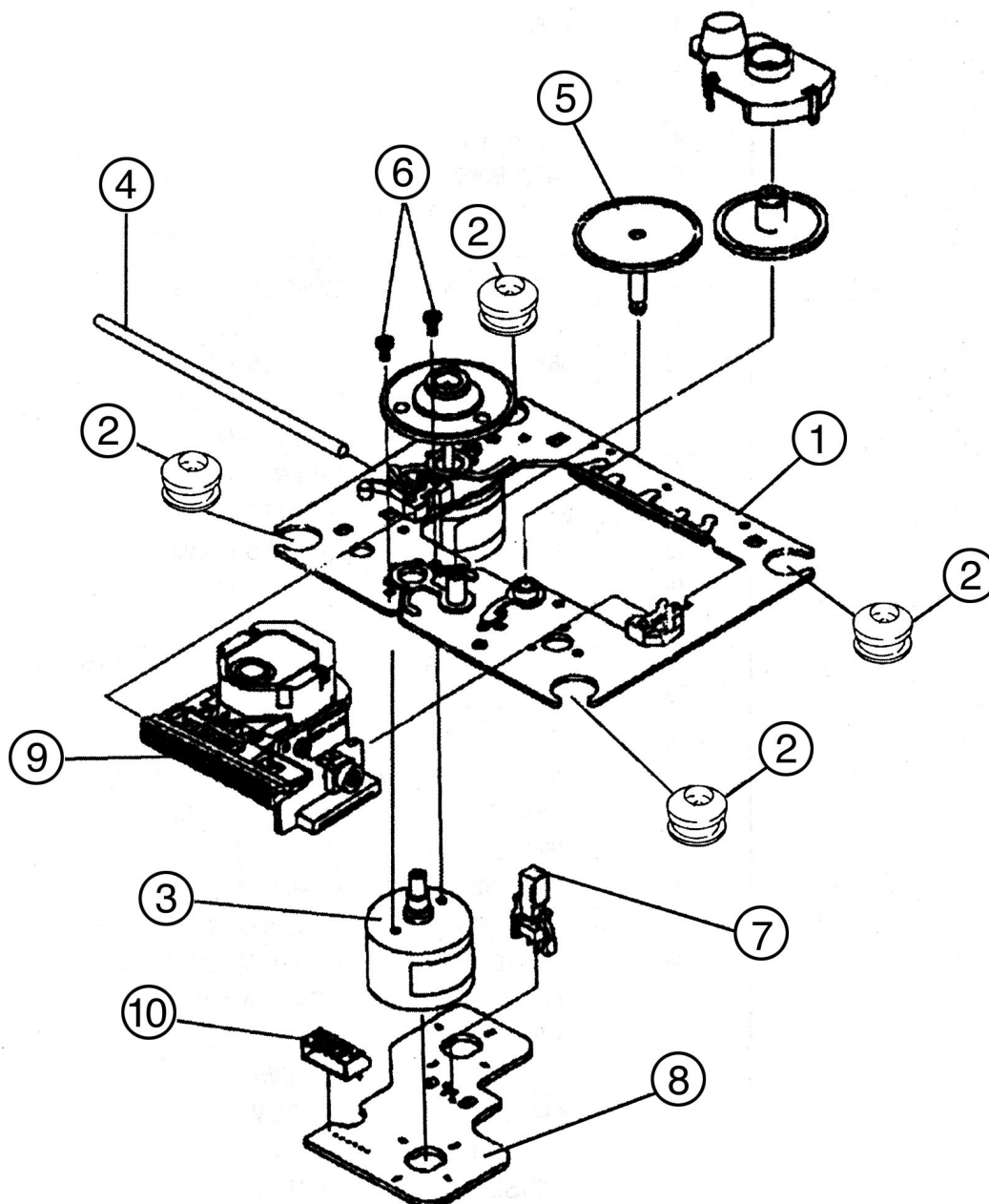
CD MECHANISM



REF.NO.	PART NO.	DESCRIPTION
-	4405SCE002A	CD MECHANISM ASS'Y(CDM-H1303)
1	4680SBP001A	MOTOR PULLEY ASS'Y
2	4400SB0001A	BELT MAIN
3	4470SB0005A	GEAR MAIN
4	88H-0004	SCREW(3X12X12)
5	4470SB0007A	GEAR PU UP-A
6	4470SB0008A	GEAR PU UP-B
7	4470SB0006A	GEAR PU DOWN
8	4470SB0004A	GEAR LOADING
9	4470SB0003A	GEAR PULLEY
10	6871SB21RAD	PCB ASS'Y CLOSE
11	353S353F	SCREW D2.6 L4.0
12	4974SB0001A	GUIDE CAM
13	4970SBN002A	SPRING CAM
14	6871SC21RAD	PCB ASS'Y OPEN
15	6871SD21RAD	PCB ASS'Y CAM
16	88H-0004	SCREW(3X12X12)
17	3040SB0002A	BASE MAIN
18	4405SCB001A	MECHANISM ASS'Y(KSM-213CCM)
19	6756SBX001A	SCREW(2.6X10X10)
20	4900SB0001A	DAMPER RUBBER
21	3040SB0003A	BASE PU(CDM-H1303)
22	88H-0002	SCREW(3X9X12)
23+24+25	4860SB0002A	CLAMP ASS'Y
23	4860SB0001A	CLAMP DISC
24	524-012A	COVER CLAMP MAGNET
25	3550SB0001A	COVER MAGNET
26	4471SB0001A	GEAR CAM ASS'Y
27	353-025B	SCREW D3.0 L8.0
28	88H-0003A	SCREW(3X12X10)
29	4974SB0003A	GUIDE WORM
30	6871SF21RAD	PCB ASS'Y SENSOR
31	4371SB0002A	SHAFT ASS'Y TRAY
32	4400SB0001B	BELT TRAY
33	3390SB0001A	TRAY LOADING
34	6870SE21RAB	PCB ASS'Y TRAY
35	4680SBP002A	MOTOR ASS'Y TRAY
36	3390SB0002A	TRAY DISC
37	4470SB0010A	GEAR TRAY A
38	4470SB0011A	GEAR TRAY B

EXPLODED VIEW/PARTS LIST

• OPTICAL PICK-UP CARRIAGE

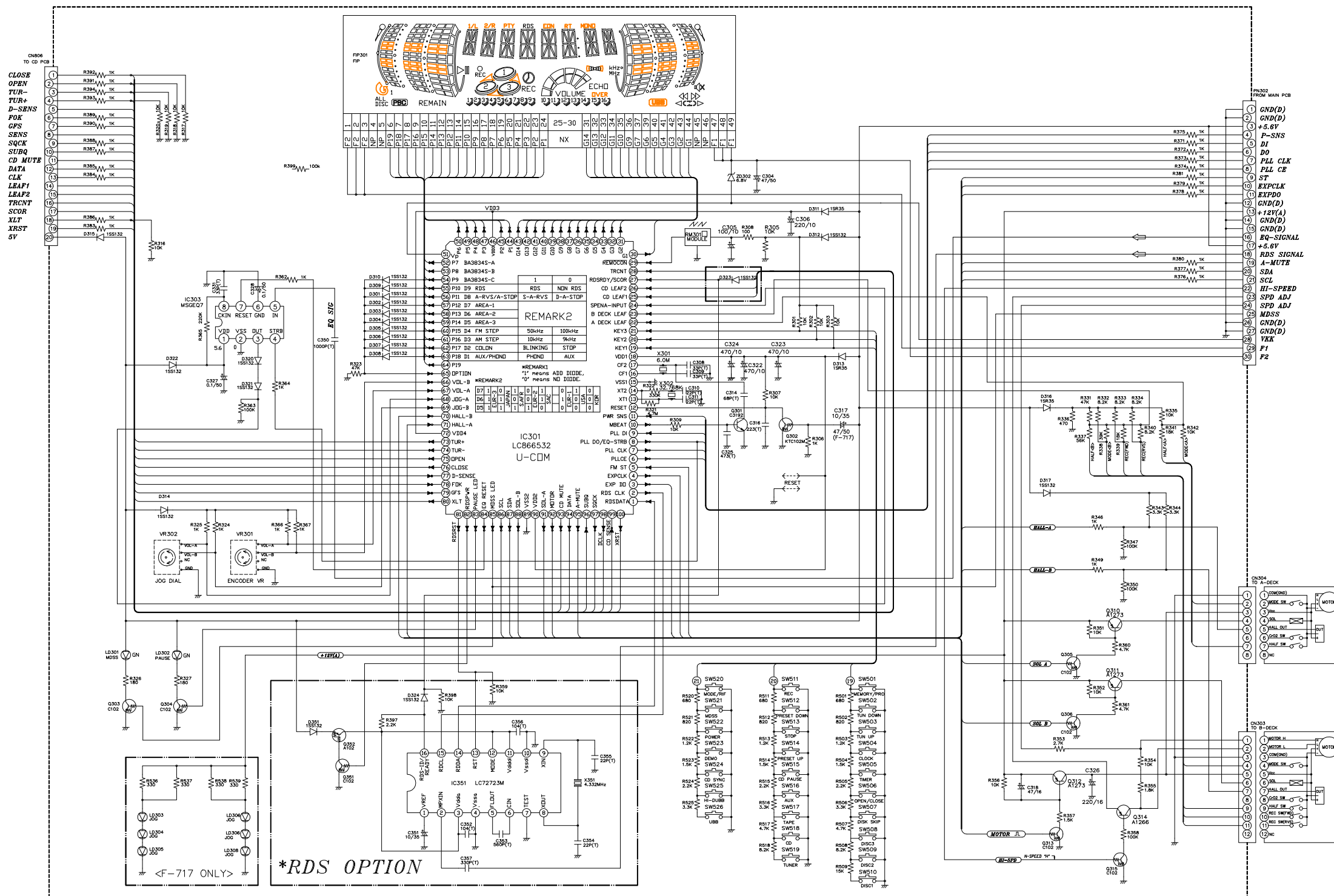


SP: Serviceable Part

NSP: Not Serviceable Part

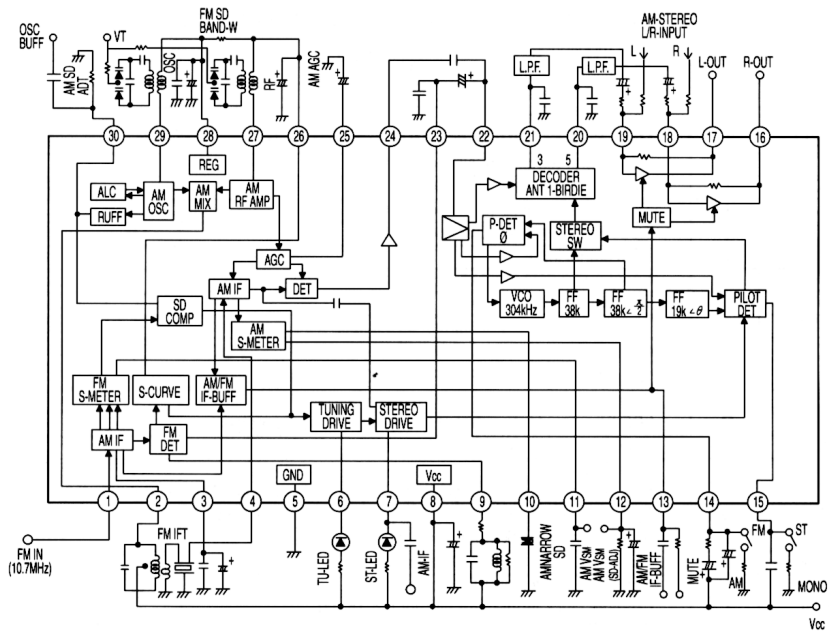
REF.NO.	PART NO	DESCRIPTION	Q'TY	REMARK
	4405SCB001A	MECHANISM ASSEMBLY, KSM-213CCM	1	SP
1	88S-0099	TT CHASSIS ASS'Y	1	NSP
2	88S-0089	INSULATOR(S)	4	NSP
3	6756S-0001A	MOTOR	1	NSP
4	88S-0088	SLIDE SHAFT(S)	1	NSP
5	6756S-G001A	GEAR	1	SP

REF.NO.	PART NO	DESCRIPTION	Q'TY	REMARK
6	88S-0101	+P 2 × 3	2	NSP
7	6756S-T001A	SWITCH	1	SP
8	88S-0098	MOTOR BASE(6P)	1	NSP
9	6756S-X001A	PICK-UP, KSS-213C	1	SP
10	88S-0100	CONNECTOR 6P	1	NSP

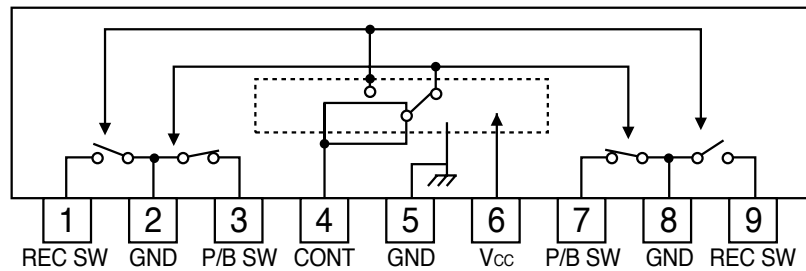


INTERNAL BLOCK DIAGRAM OF ICs

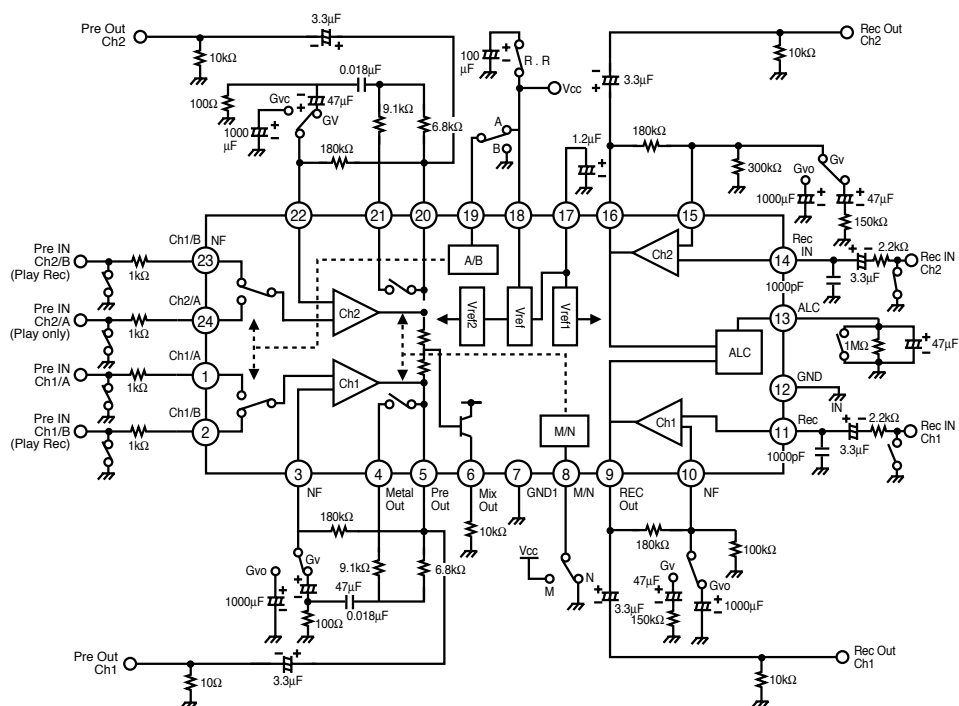
LA1837



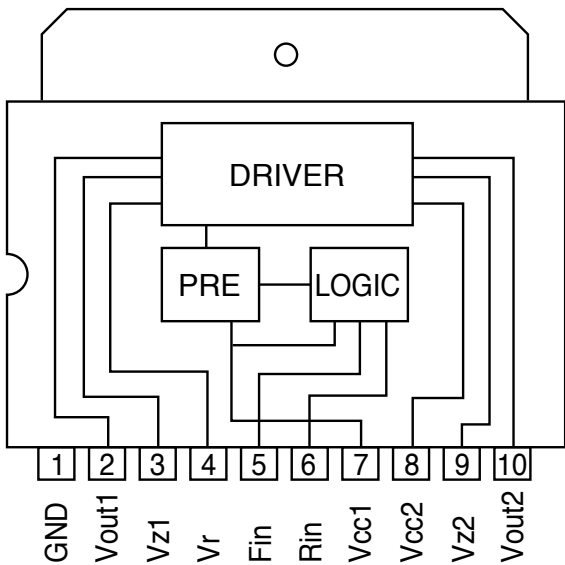
KA3082



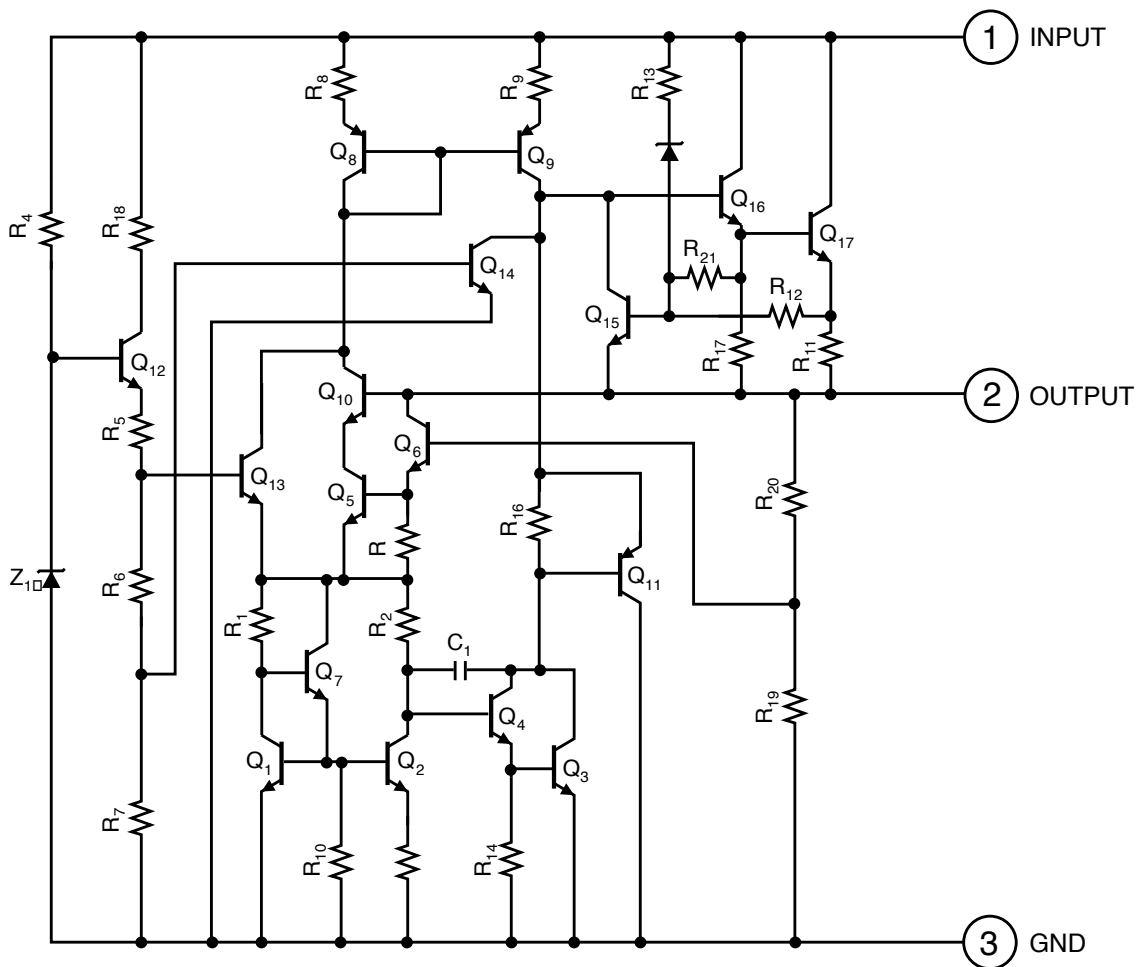
KIA6289N



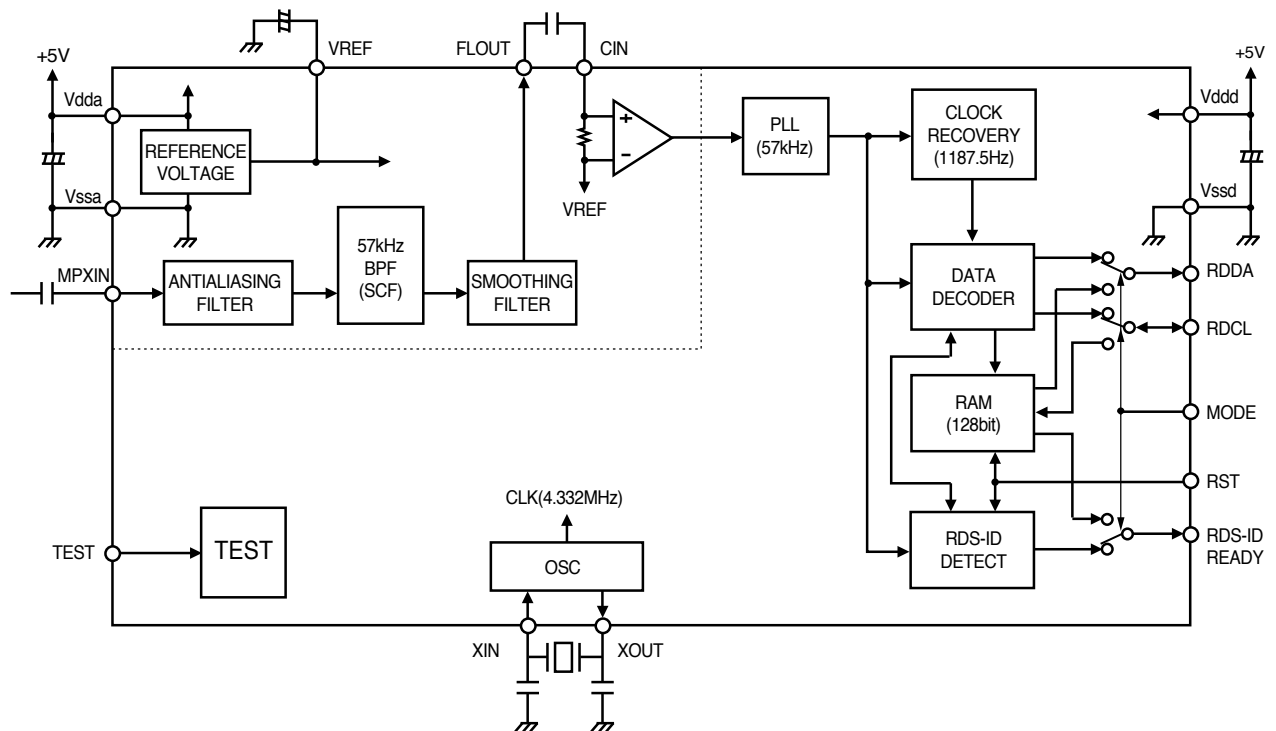
■ **KA8301**



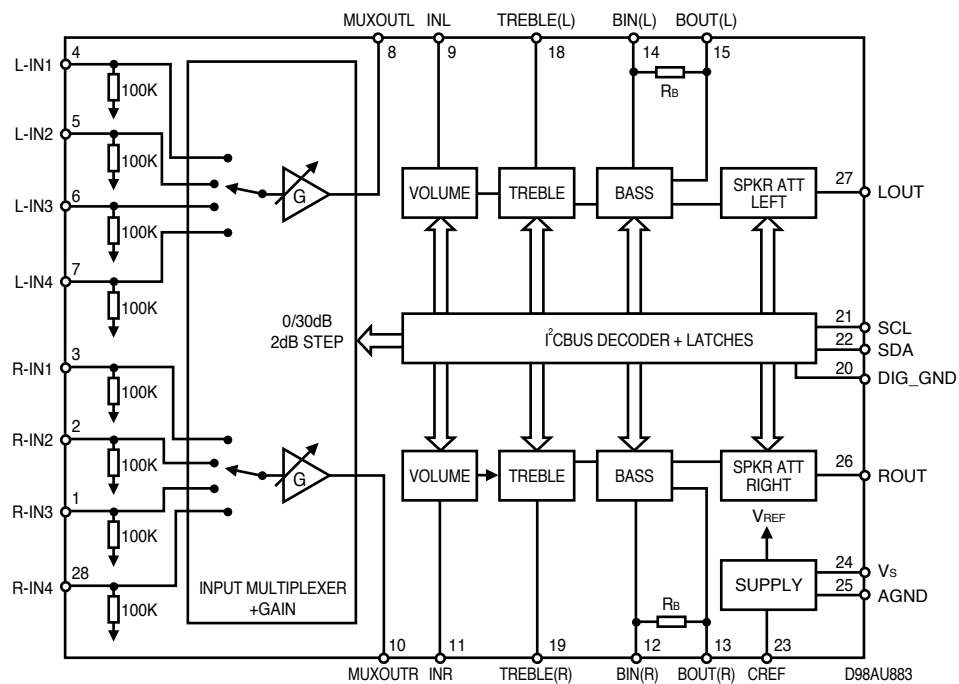
■ KIA7805 P/PI ~ KIA7824P/PI



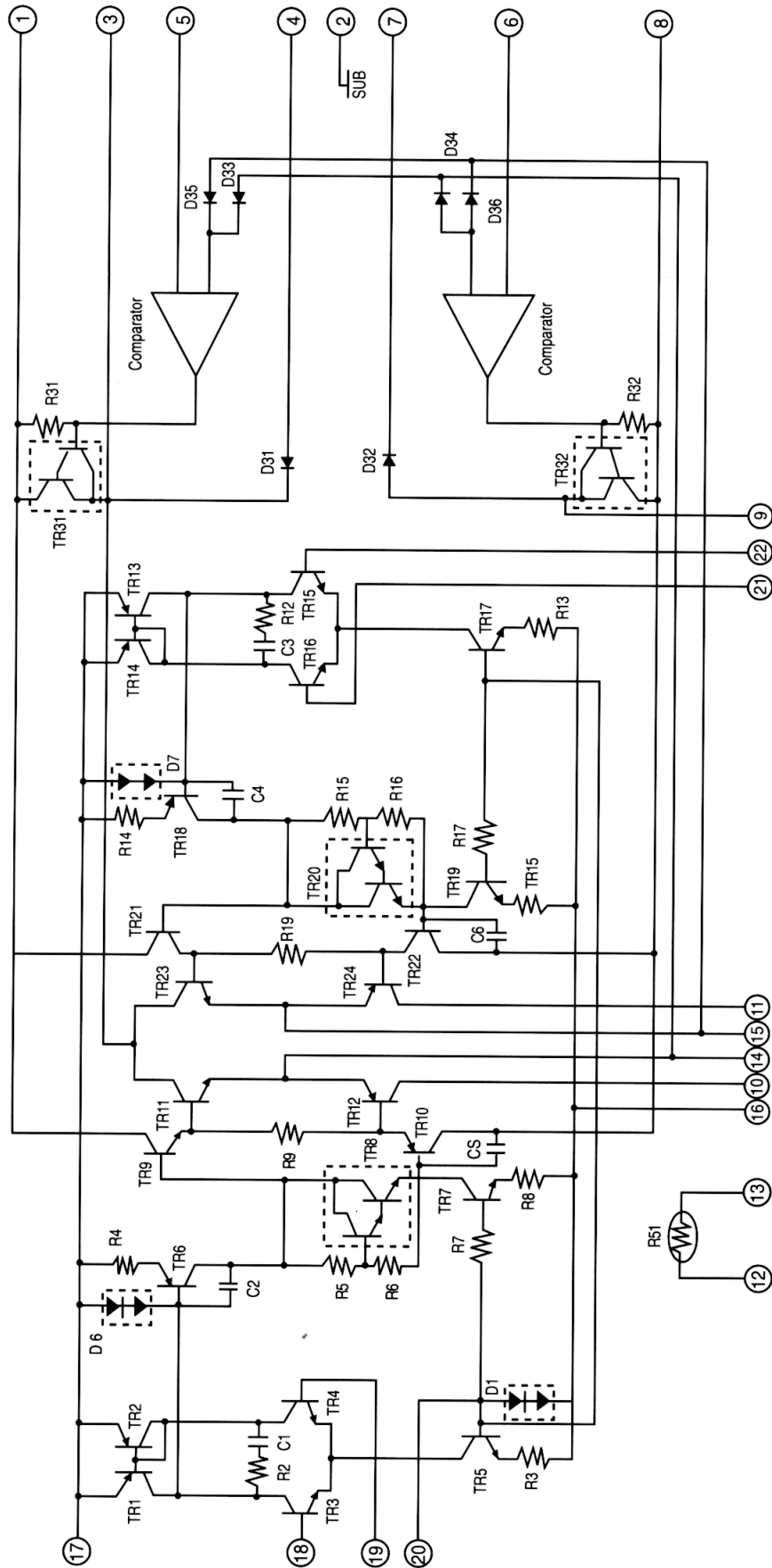
■ LC7273M



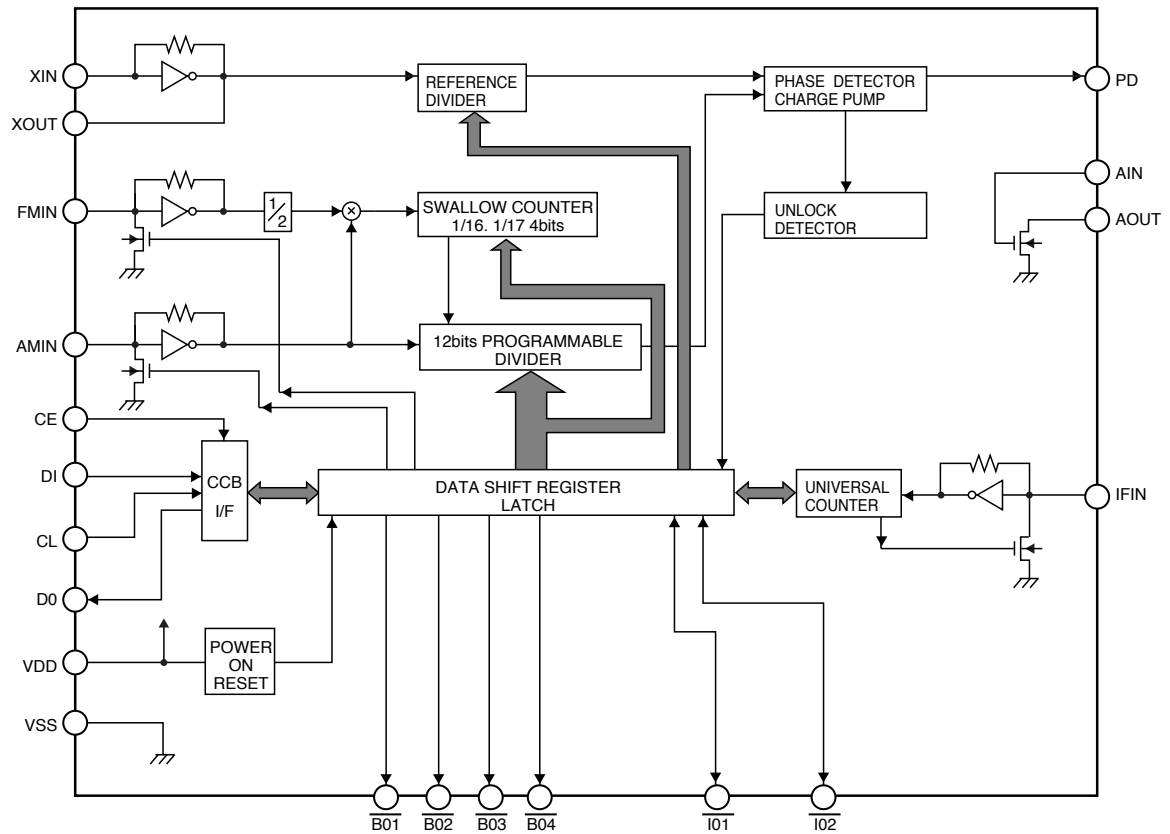
■ TDA7440D



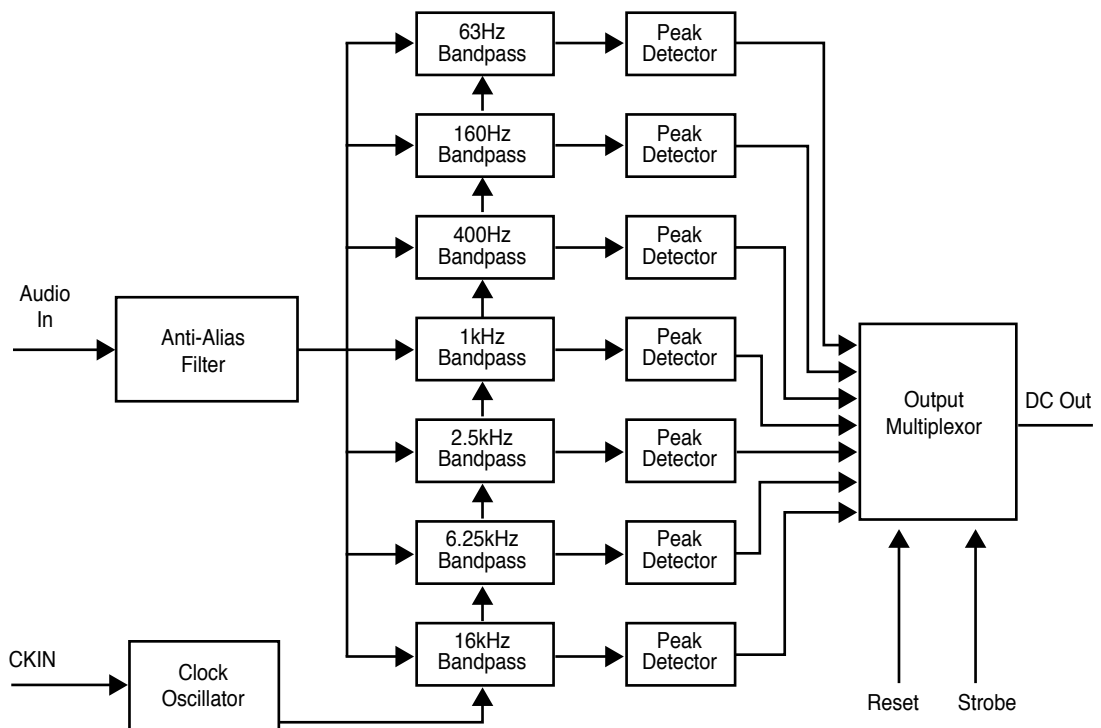
■ STK411-220E



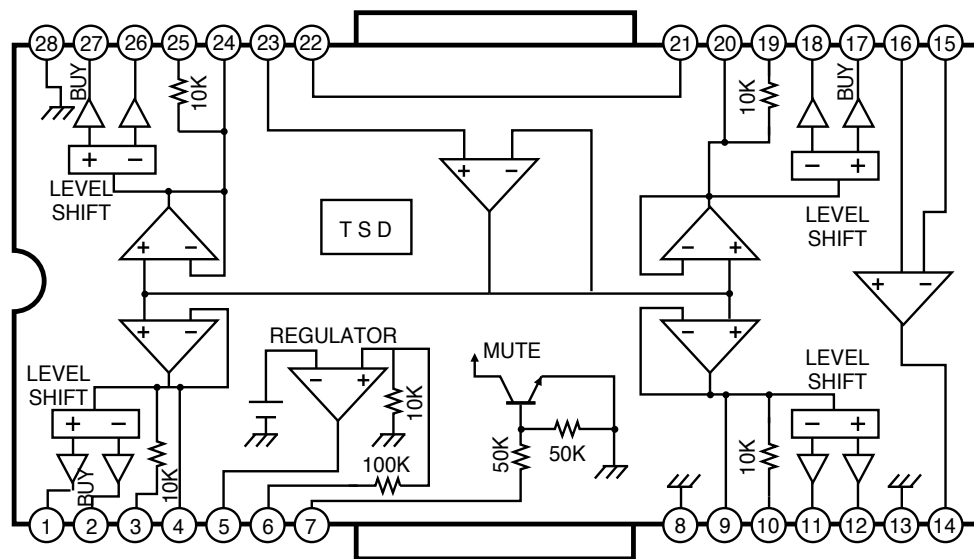
■ LC72131, 72131M



■ MSGEQ7



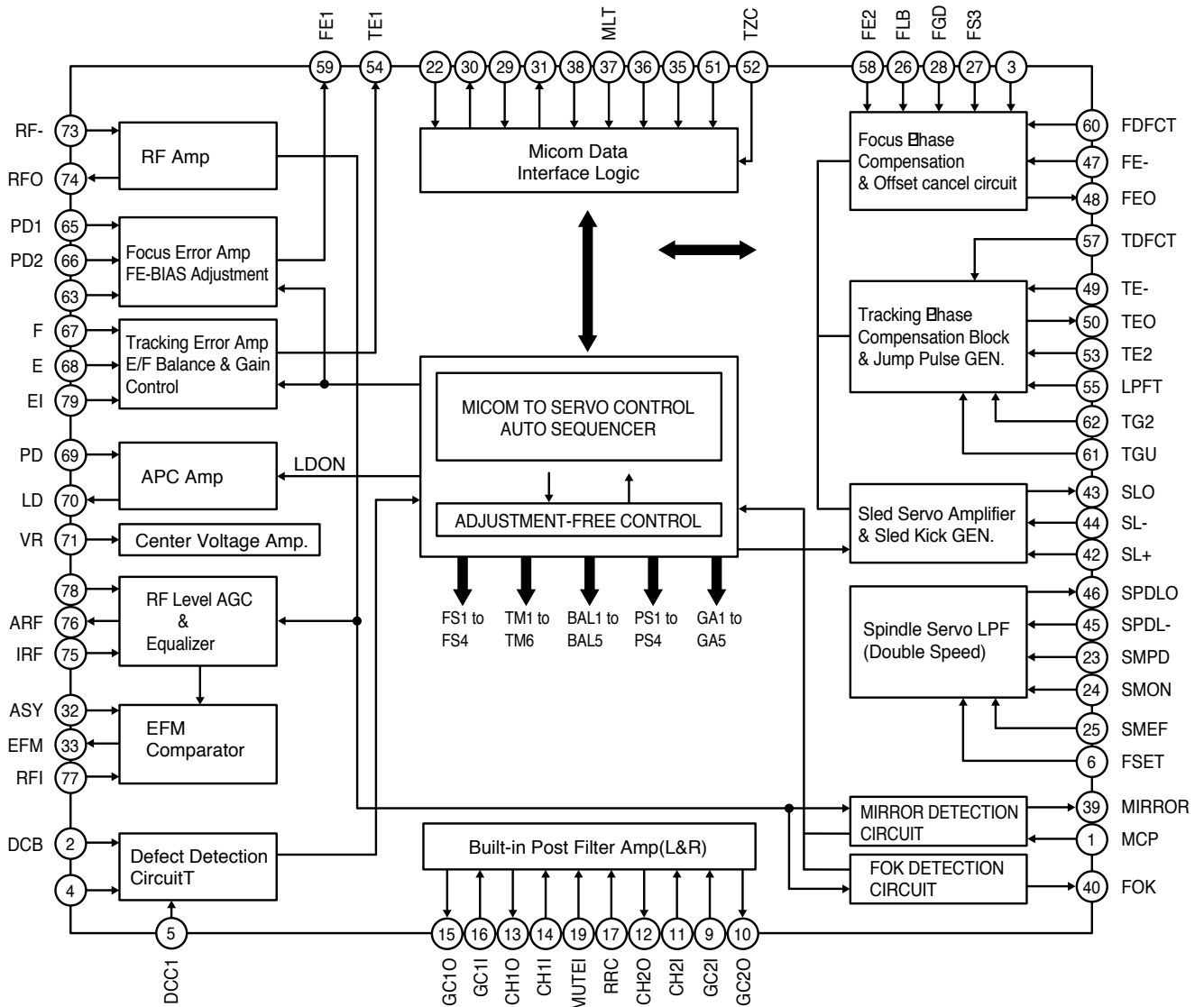
KA3010



PIN DESCRIPTION

Pin No.	Symbol	I/O	Description
1	DO1.1	O	DRIVE OUTPUT
2	DO1.2	O	DRIVE OUTPUT
3	DI1.1	I	DRIVE INPUT
4	DI1.2	I	DRIVE INPUT
5	REG		REGULATOR
6	REO	O	REGULATOR OUTPUT
7	MUTE		MUTE
8	GND1		GROUND
9	DI2.1	I	DRIVE INPUT
10	DI2.2	I	DRIVE INPUT
11	DO2.1	O	DRIVE OUTPUT
12	DO2.2	O	DRIVE OUTPUT
13	GND2		GROUND
14	OPOUT	O	OPAMP OUTPUT
15	OPIN (-)	I	OPAMP OUTPUT (-)
16	OPIN (+)	I	OPAMP INPUT (+)
17	DO3.1	O	DRIVE OUTPUT
18	DO3.2	O	DRIVE OUTPUT
19	DI3.1	I	DRIVE INPUT
20	DI3.2	I	DRIVE INPUT
21	VCC1		SUPPLY VOLTAGE
22	VCC2		SUPPLY VOLTAGE
23	VREF		2.5V BIAS VOLTAGE
24	DI4.1	I	DRIVE INPUT
25	DI4.2	I	DRIVE INPUT
26	DO4.1	O	DRIVE OUTPUT
27	DO4.2	O	DRIVE OUTPUT
28	GND3		GROUND

KB9223

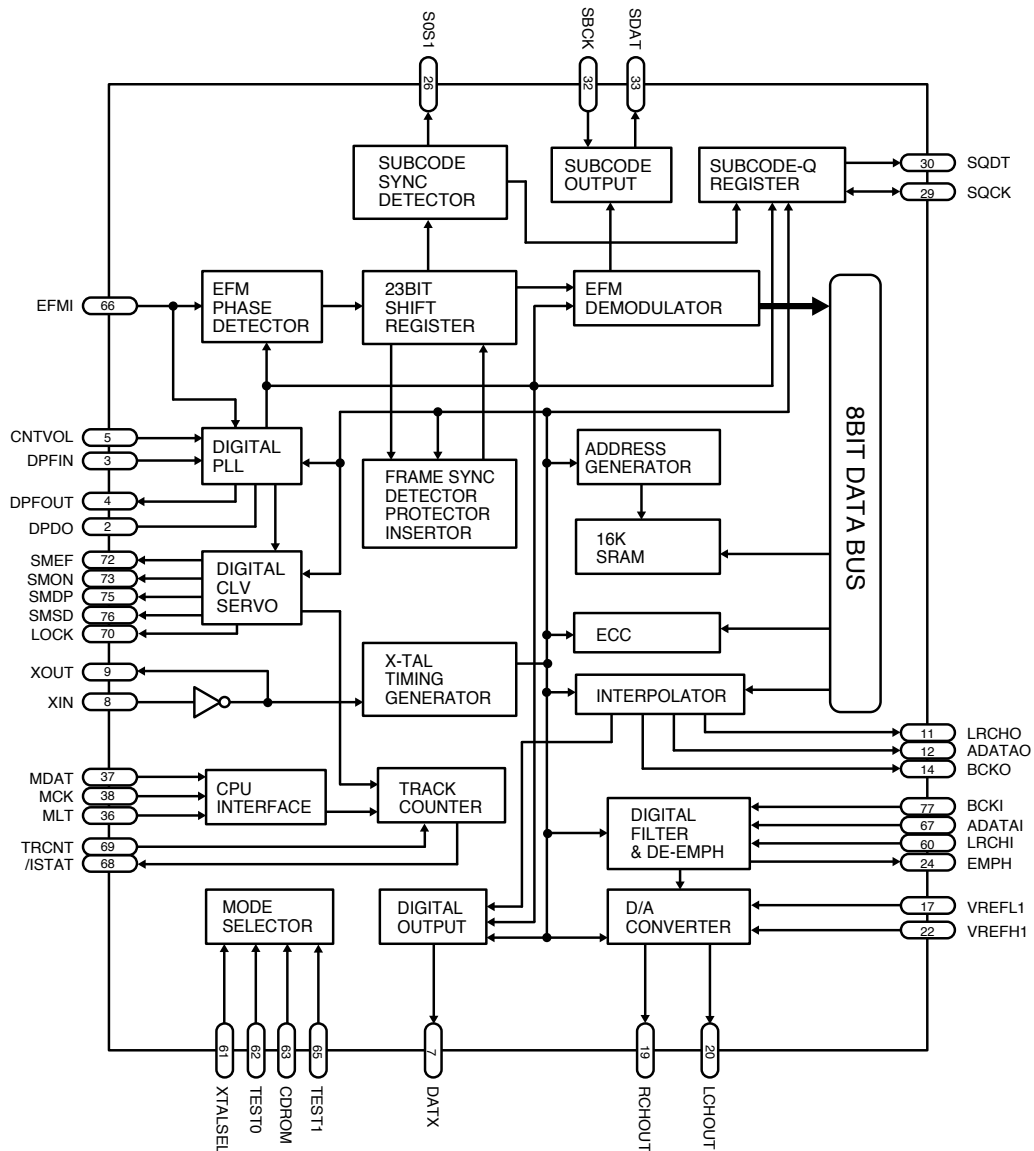


PIN DESCRIPTION

Pin No.	System	Description
1	MCP	Capacitor connection pin for mirror hold
2	DCB	Capacitor connection pin for defect Bottom hold
3	FRSH.	Capacitor connection pin for time constant to generate focus search waveform
4	DCC2	The input pin through capacitor of defect bottom hold output
5	DCC1	The output pin of defect bottom hold
6	FSET	The peak frequency setting pin for focus, tracking servo and cut off frequency of CLV LPF
7	VDDA	Analog VCC for servo part
8	VCCP	VCC for post filter
9	GC2I	Amplifier negative input pin for gain and low pass filtering of DAC output CH2
10	GC2O	Amplifier output pin for gain and low pass filtering of DAC output CH2
11	CH2I	The input pin for post filter channel2
12	CH2O	The output pin for post filter channel2
13	CH1O	The output pin for post filter channel1
14	CH1I	The input pin for post filter channel1
15	GC1O	Amplifier output pin for gain and low pass filtering of DAC output CH1

Pin No.	System	Description
16	GC1I	Amplifier negative input pin for gain and low pass filtering of DAC output CH1
17	RRC	The pin for noise reduction of post filter bias
18	VSSP	VSS for post filter
19	MUTEI	The input pin for post filter muting control
20	ISSET	The input pin for current setting of focus search, track jump and sled kick voltage
21	VREG	The output pin of regulator
22	WDCK	The clock input pin for auto sequence
23	SMDP	The input pin of CLV control output pin SMDP of DSP
24	SMON	The input pin for spindle servo ON through SMON of DSP
25	SMEF	The input pin of provide for an external LPF time constant
26	FLB	Capacitor connection pin to perform rising low bandwidth of focus loop
27	FS3	The pin for high frequency gain change of focus loop with internal FS3 switch
28	FGD	Reducing high frequency gain with capacitor between FS3 pin
29	LOCK	Sled runaway prevention pin
30	TRCNT	Track count output pin
31	ISTAT	Internal status output pin
32	ASY	The input pin for asymmetry control
33	EFM	EFM comparator output pin
34	VSSA	Analog VSS for servo part
35	MCK	Micom clock input pin
36	MDATA	Micom data input pin
37	MLT	Micom data latch input pin
38	RESET	Reset input pin
39	MIRROR	The mirror output for test
40	FOK	The output pin of focus OK comparator
41	SSTOP	The pin for detection whether pick_up position is innermost or not
42	SL+	The noninverting input pin of sled servo amplifier
43	SLO	The output pin of sled servo amplifier
44	SL-	The inverting input pin of sled servo amplifier
45	SPDL-	The noninverting input pin of spindle servo amplifier
46	SPDLO	The output pin of spindle servo amplifier
47	FE-	The inverting input pin of focus servo amplifier
48	FEO	The output pin of focus servo amplifier
49	TE-	The inverting input pin of tracking servo amplifier
50	TEO	The output pin of tracking servo amplifier
51	ATSC	The input pin for Anti-shock detection
52	TZC	The comparator input pin for tracking zero crossing detection
53	TE2	Tracking servo input pin
54	TE1	Tracking error amplifier output pin
55	LPFT	The input pin of tracking error low pass filtering signal
56	DVDD	The power supply pin for logic circuit
57	TDFCT	The capacitor connection pin for tracking defect compensation
58	FE2	Focus servo input pin
59	FE1	Focus error amplifier output pin
60	FDFCT	The capacitor connection pin for focus defect compensation
61	TGU	The capacitor connection pin for high frequency tracking gain switch
62	TG2	The pin for high frequency gain change of tracking servo loop with internal TG2 switch
63	FEBIAS	Focus error bias voltage control pin
64	DVEE	The DVEE pin for logic circuit
65	PD1	The negative input pin of RF I/V amplifier1 (A+C signal)
66	PD2	The negative input pin of RF I/V amplifier2 (B+D signal)
67	F	The negative input pin of F I/V amplifier (F signal)
68	E	The negative input pin of E I/V amplifier (E signal)
69	PD	The input pin for APC
70	LD	The output pin for APC
71	VR	The output pin of (AVEE+AVCC)/2 voltage
72	VCC	VCC for RF part
73	RF-	RF summing amplifier inverting input pin
74	RFO	RF summing amplifier output pin
75	IRF	The input pin for AGC
76	ARF	The output pin for AGC
77	RFI	The input pin for EFM comparing
78	CAGC	The capacitor connection pin for AGC
79	EI	Feedback input pin of E I/V amplifier for EF Balance control
80	GND	GND for RF part

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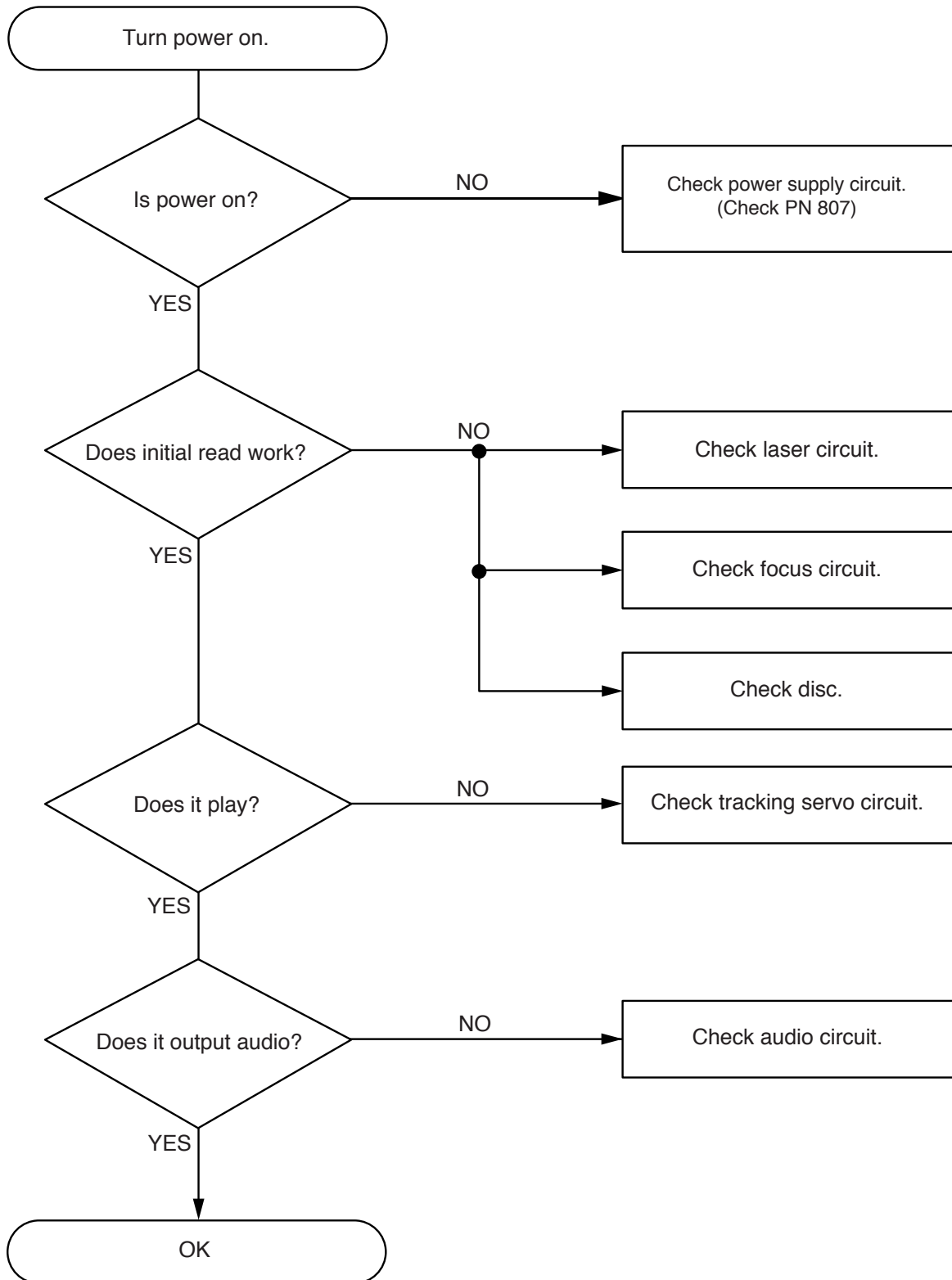


PIN DESCRIPTION

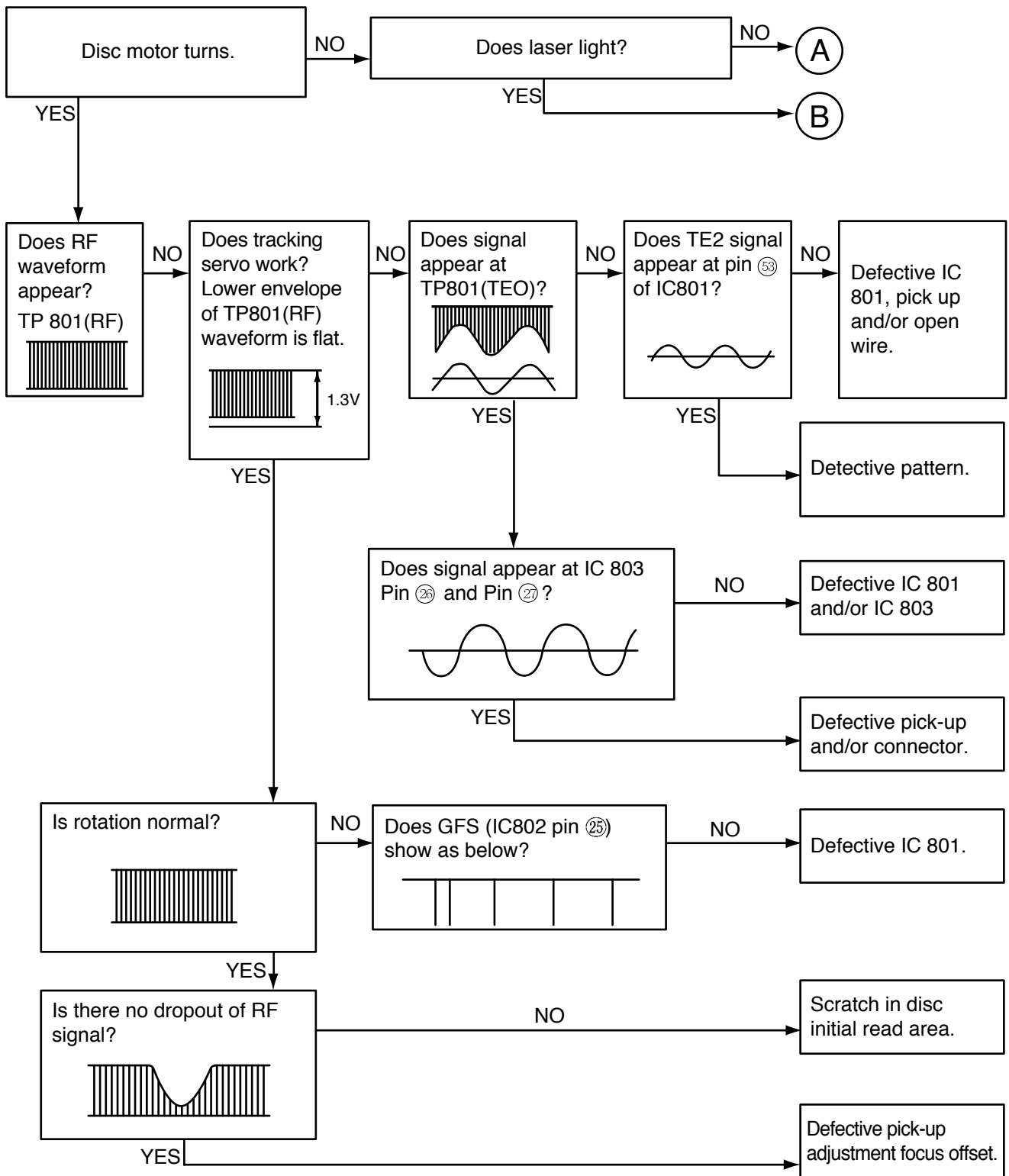
Pin No.	Symbol	IO	Description
1	AVDD1	-	Analog VCC1
2	DPDO	O	Charge pump output for Digital PLL
3	DPFIN	I	Filter input for Digital PLL
4	DPFOUT	O	Filter output for Digital PLL
5	CNTVOL	I	VCO control voltage for Digital PLL
6	AVSS1	-	Analog Ground1
7	DATX	O	Digital Audio output data
8	XIN	I	X' tal oscillator input
9	XOUT	O	X' tal oscillator output
10	WDCHO	O	Word clock output of 48bit/Slot (88.2KHz)
11	LRCHO	O	Channel clock output of 48 bit/Slot (44.1KHz), 88.2KHz when ESP ON
12	ADATAO	O	Serial audio data output of 48 bit/Slot (MSB first), double speed output when ESP ON
13	DVSS1	-	Digital Ground1
14	BCKO	O	Audio data bit clock output of 48 bit/Slot (2.1168MHz), 4.2336MHz when ESP ON
15	C2PO	O	C2 Pointer for output audio data
16	VREFL2	I	Input terminal2 of reference voltage 'L' (Floating)

Pin No.	Symbol	IO	Description
17	VREFL1	I	Input terminal1 of reference voltage "L" (GND connection)
18	AVDD2	-	Analog VCC2
19	RCHOUT	O	Right-Channel audio output through D/A converter
20	LCHOUT	O	Left-Channel audio output through D/A converter
21	AVSS2	-	Analog ground2
22	VREFH1	I	Input terminal1 of reference voltage "H" (VDD connection)
23	VREFH2	I	Input terminal2 of reference voltage "H" (Floating)
24	EMPH	O	Emphasis/Non-Emphasis output, H: Emphasis ON, L: Emphasis OFF
25	LKFS	O	The Lock Status output of frame sync
26	S0S1	O	Output of subcode sync signal (S0+S1)
27	RESET	I	System reset at "L"
28	/ESP	I	ESP function ON/OFF control ("L": ESP function ON, "H": ESP function OFF)
29	SQCK	I	Clock for output Subcode-Q data
30	SQDT	O	Serial output of Subcode-Q data
31	SQOK	O	The CRC (Cycle Redundancy Check) check result signal output of Subcode-Q
32	SBCK	I	Clock for output subcode data
33	SDAT	O	Subcode serial data output
34	DVDD1	-	Digital VDD1
35	MUTE	I	Mute control input ("H": Mute ON)
36	MLT	I	Latch Signal Input from Micom (Scmit Trigger)
37	MDAT	I	Signal data input from Micom (Scmit Trigger)
38	MCK	I	Signal clock Input from Micom (Scmit Trigger)
39	DB8	I/O	SRAM data I/O port 8 (MSB)
40	DB7	I/O	SRAM data I/O port 7
41	DB6	I/O	SRAM data I/O port 6
42	DB5	I/O	SRAM data I/O port 5
43	DB4	I/O	SRAM data I/O port 4
44	DB3	I/O	SRAM data I/O port 3
45	DB2	I/O	SRAM data I/O port 2
46	DB1	I/O	SRAM data I/O port 1 (LSB)
47	C1F1	I/O	Monitoring output for C1 error correction (RA1)
48	C1F2	I/O	Monitoring output for C1 error correction (RA2)
49	C2F1	I/O	Monitoring output for C2 error correction (RA3)
50	C2F2	I/O	Monitoring output for C2 error correction (RA4)
51	C2FL	I/O	C2 decoder flag (RA5, "H": When one processing C2 code is impossible correction status.)
52	/PBCK	I/O	Output of VCO/2 (4.3218MHz) (RA6)
53	DVSS2	I/O	Digital ground 2
54	FSDW	I/O	Window or unprotected frame sync (RA7)
55	ULKFS	I/O	Frame sync protection state (RA8)
56	/JIT	I/O	Display of either RAM overflow onncerflow for ± 4 frame jitter margin (RA9)
57	C4M	I/O	Only monitoring signal (4.2336M .. RA10)
58	C16M	I/O	16.9344MHz signal output (RA11)
59	/WE	I/O	Terminal for test
60	/CS	I/O	Terminal for test
61	XTALSEL	I	Mode Selection1 (H: 33.8688MHz, L: 16.9344MHz)
62	TEST0	I	TEST input terminal (GND connection)
63	CDROM	I	Mode Selection2 (H: CD-ROM, L: CDP)
64	SRAM	I	TEST input terminal (GND connection)
65	TEST1	I	TEST input terminal (GND connection)
66	EFMI	I	EFM signal input
67	ADATAI	I	Serial audio data input of 48 bit/Slot (MSB first)
68	/ISTAT	O	The internal status output
69	TRCNT	I	Tracking counter input signal
70	LOCK	O	Output signal of LKFS condition sampled PBFR/16 (if LKFS is "H", LOCK is "H", if LKFS is sampled "L" at least 8 times by PBFR/16, LOCK is "L".)
71	PBFR	O	Write frame clock (Lock: 7.35KHz)
72	SMEF	O	LPF time constant control of the spindle servo error signal
73	SMON	O	ON/OFF control signal for spindle servo
74	DVDD2	-	Digital VDD2
75	SMDP	O	Spindle Motor drive (Rough control in the SPEED mode, Phase control in the PHASE mode)
76	SMSD	O	Spindle Motor drive (Velocity control in the PHASE mode)
77	BCKI	I	Audio data bit clock input of 48 bit/Slot (2.1168MHz)
78	TESTV	I	TEST input terminal (GND connection)
79	DSPEED	I	TEST input terminal (VDD connection)
80	LRCHI	I	Channel clock input of 48 bit/Slot (44.1KHz)

TROUBLESHOOTING

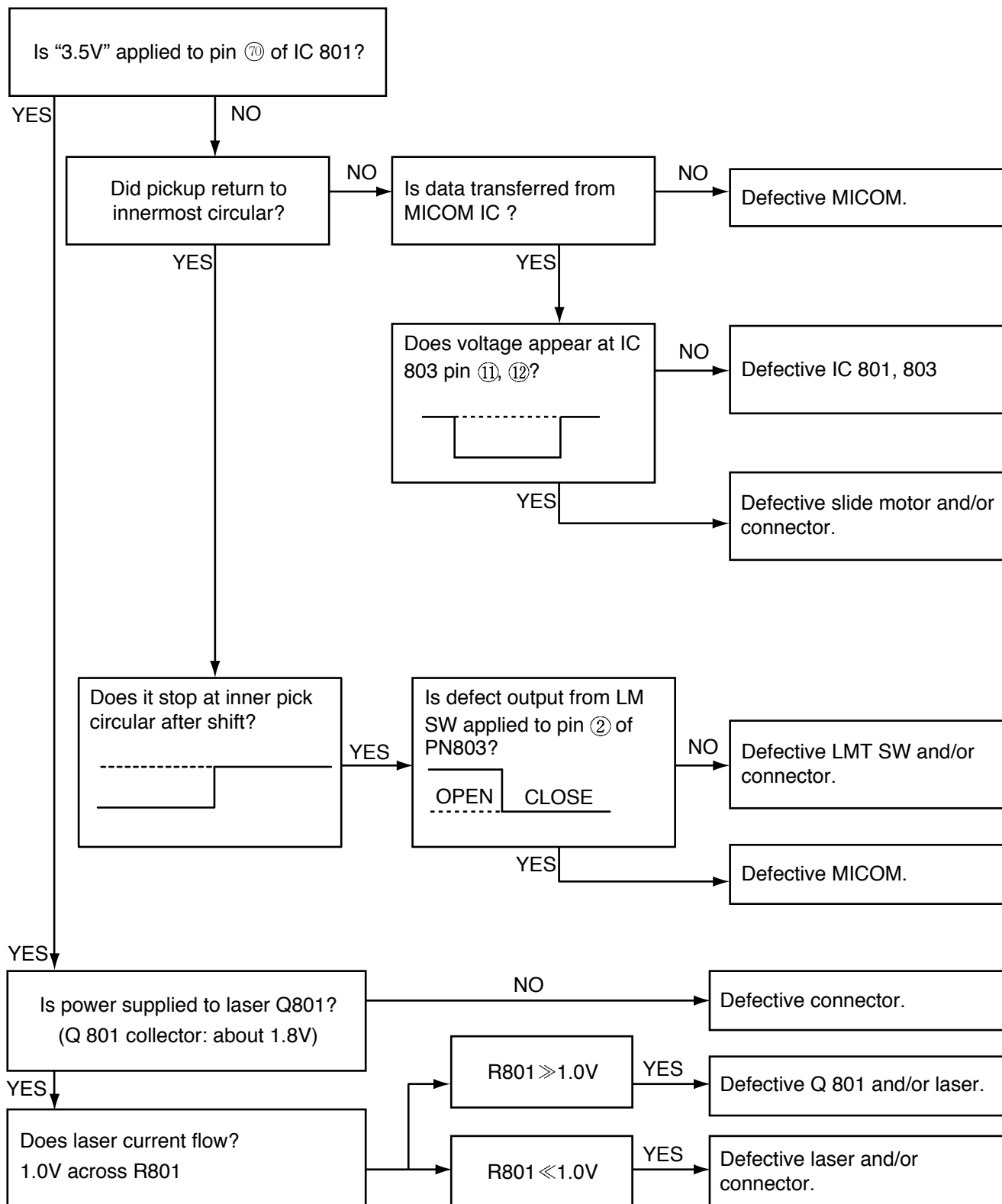


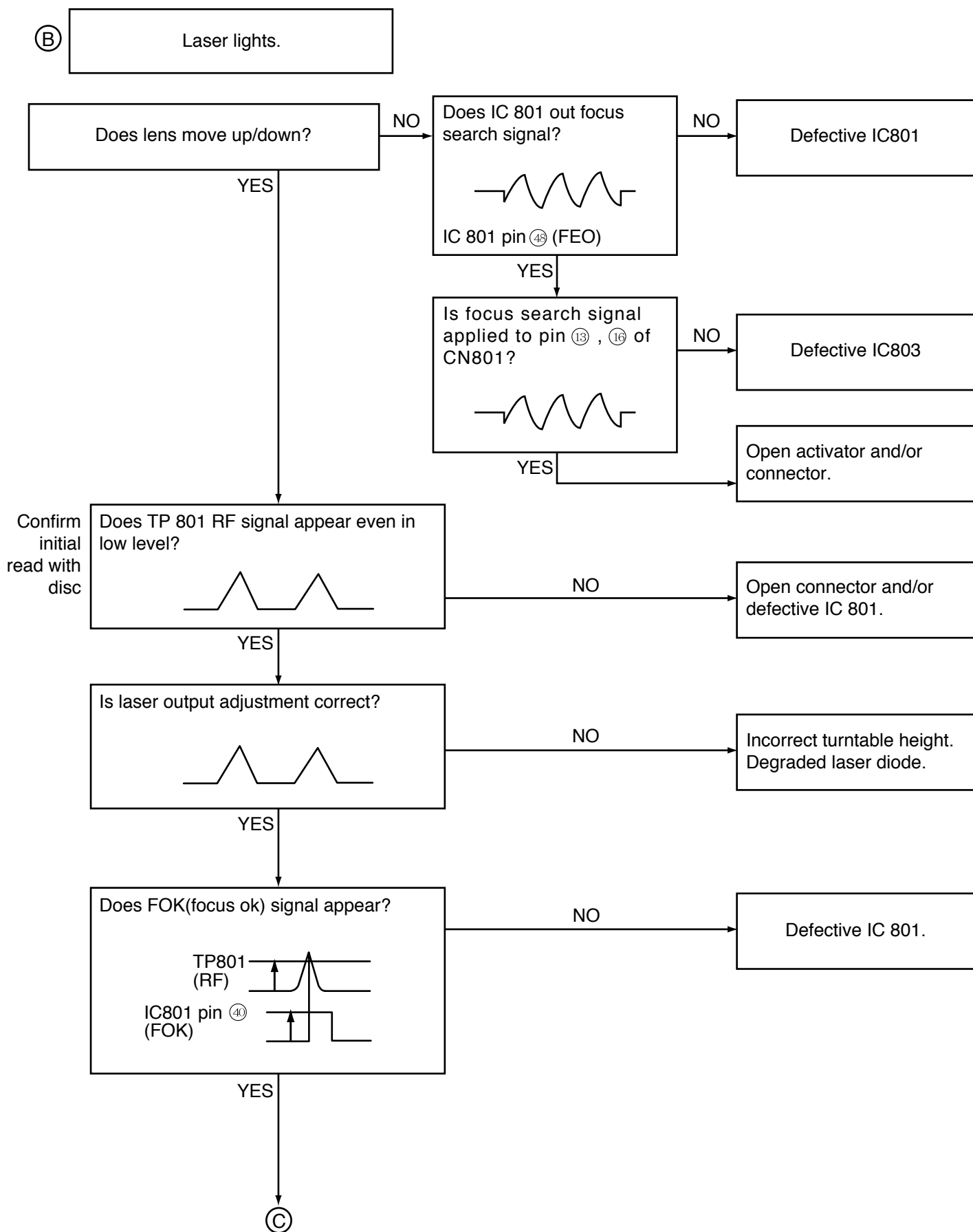
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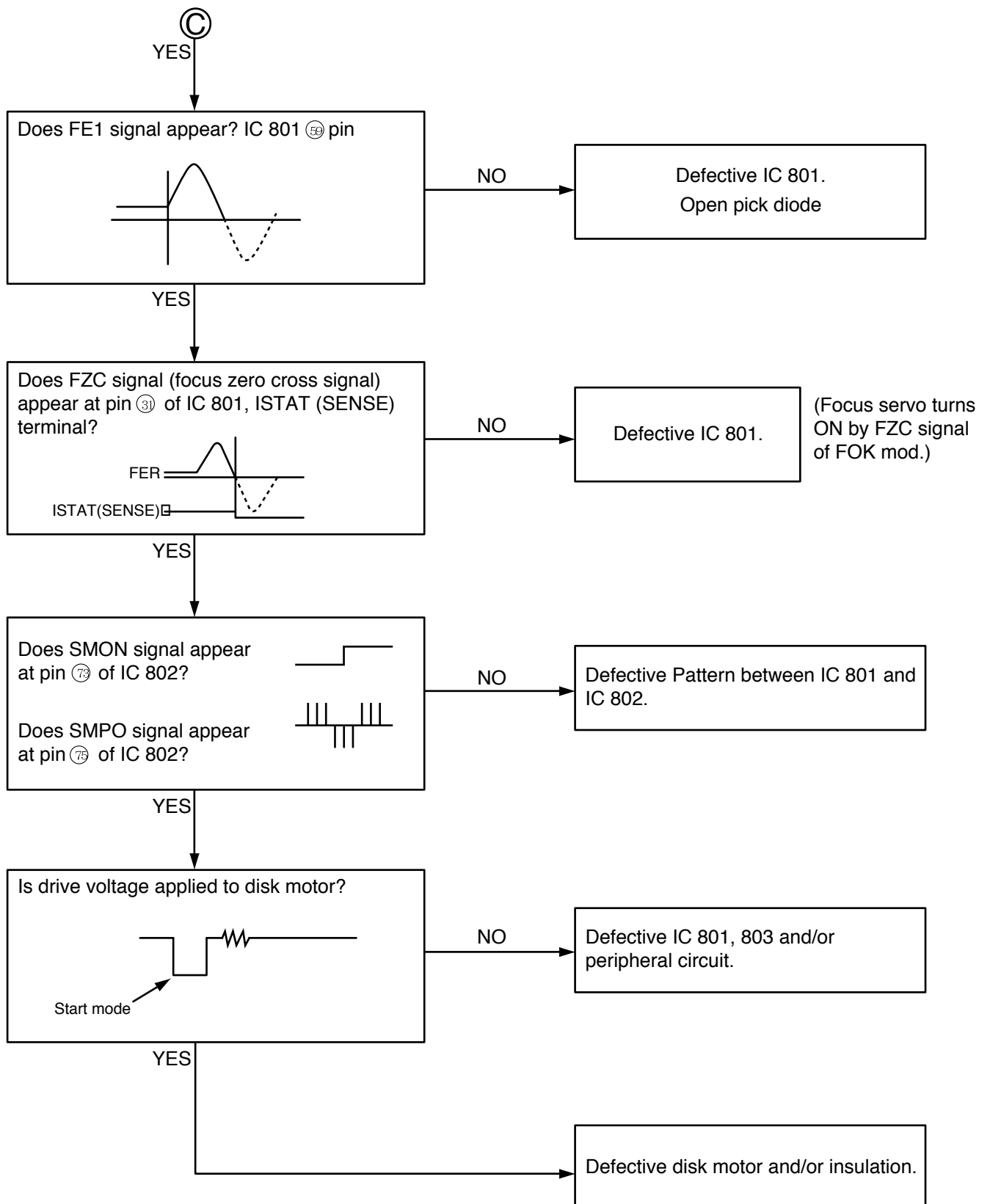


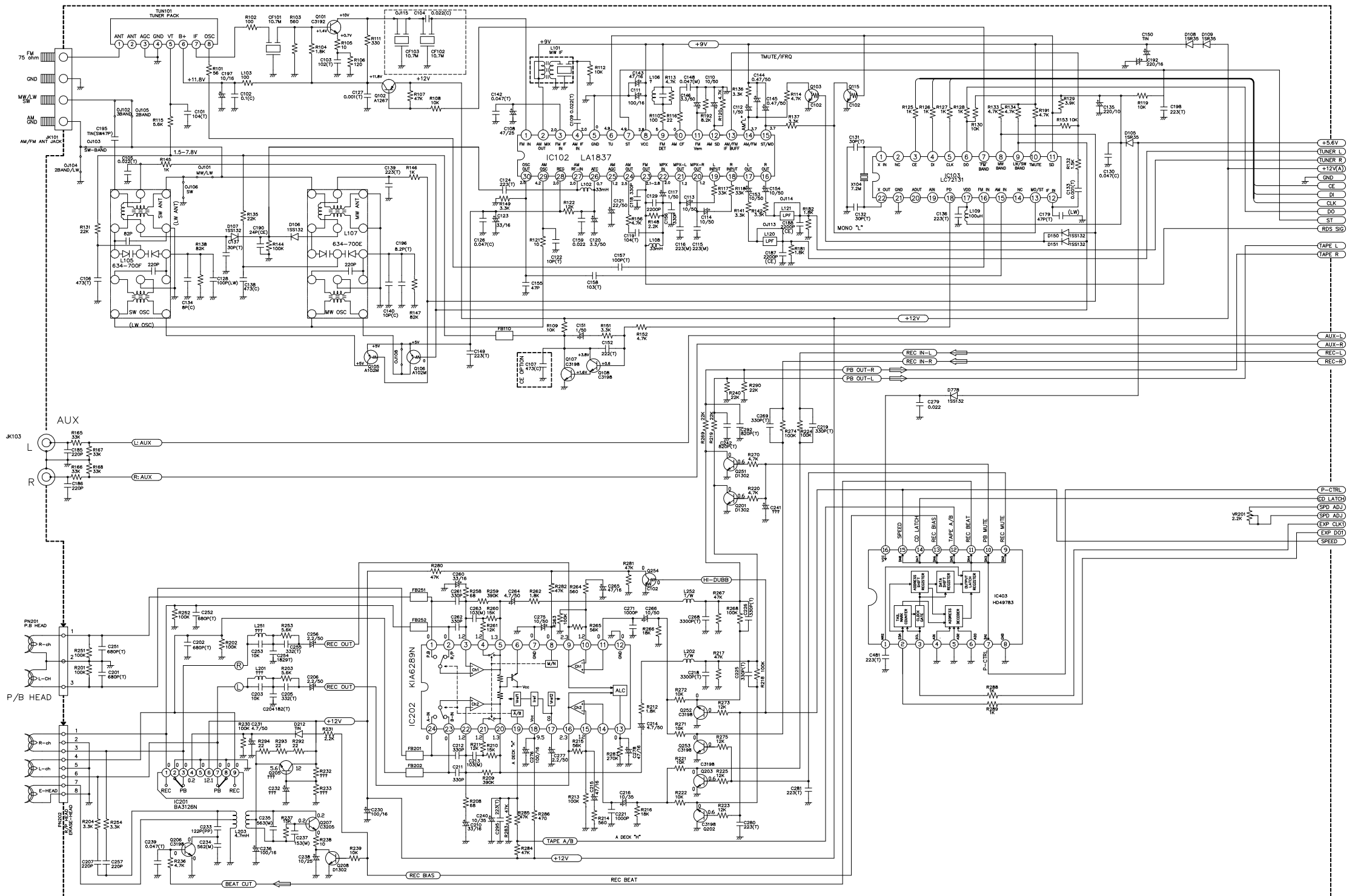
(A)

Laser does not light.



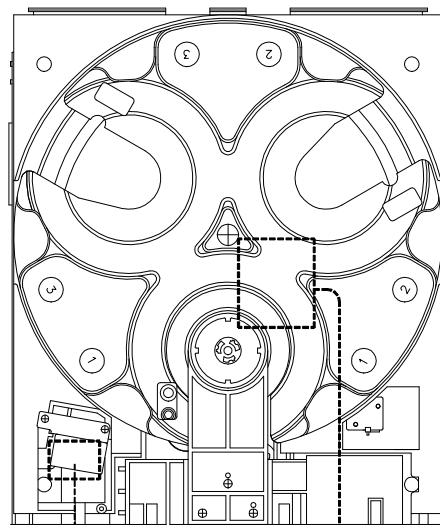
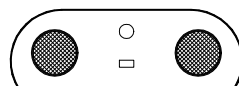




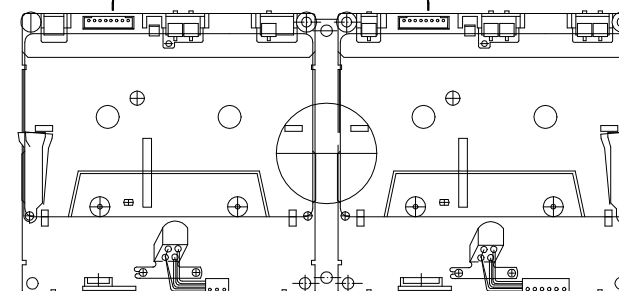
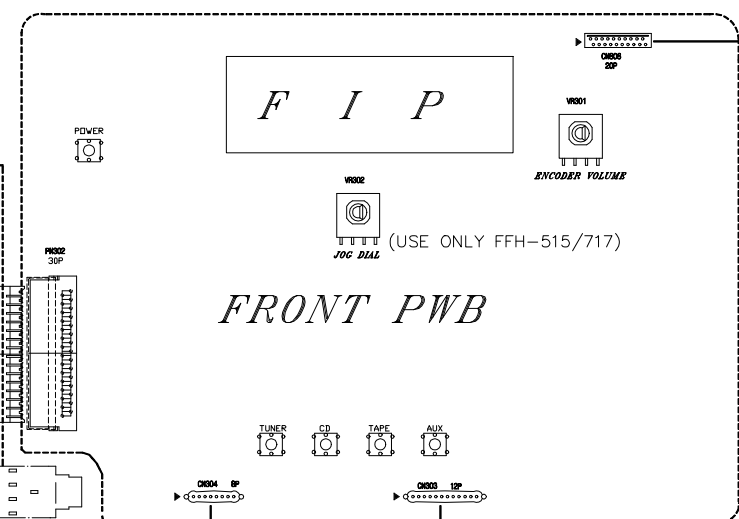
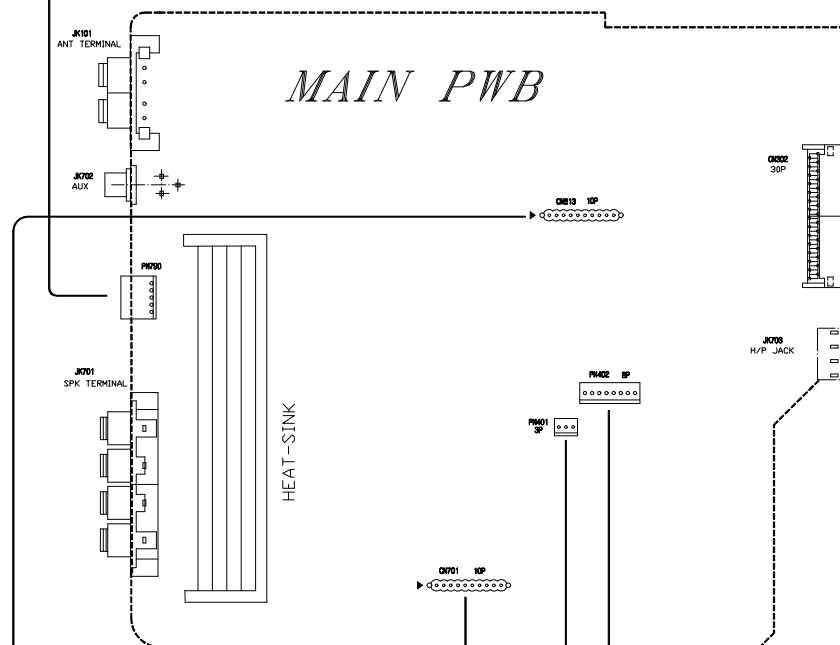


3CD CHANGER MECHANISM ASSY

MTB (OPTION)



MAIN PWB



DECK MECHANISM

