

A193 and A224

Point to Point Diagram (2/2)

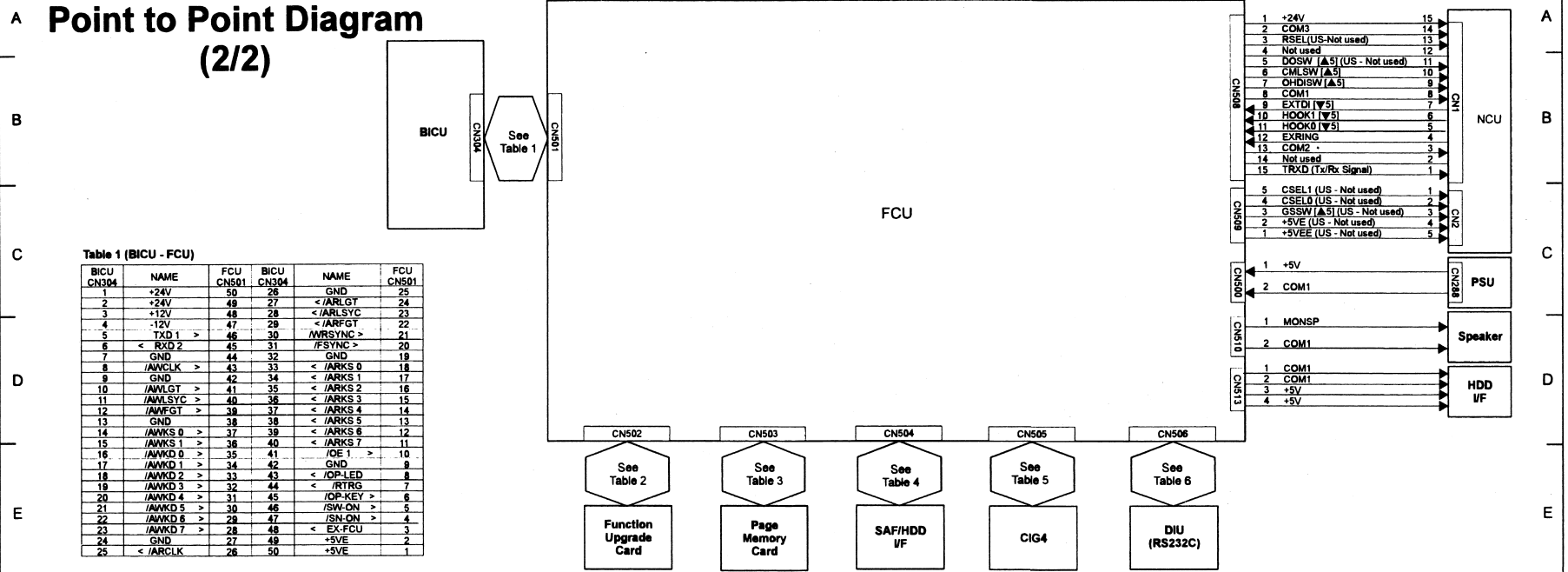


Table 1 (BICU - FCU)

BICU CN304	NAME	FCU CN501	BICU CN304	NAME	FCU CN501
1	+24V	50	26	GND	25
2	+24V	49	27	< /ARLGT	24
3	+12V	48	28	< /ARLSYC	23
4	+12V	47	29	< /ARFGT	22
5	< RXD 1	46	30	< /ARFVNC	21
6	< RXD 2	45	31	< /FSYNC	20
7	GND	44	32	GND	19
8	< /AVCLK	43	33	< /ARKS 0	18
9	GND	42	34	< /ARKS 1	17
10	< /AVLGT	41	35	< /ARKS 2	16
11	< /AVLSYC	40	36	< /ARKS 3	15
12	< /AVFGT	39	37	< /ARKS 4	14
13	GND	38	38	< /ARKS 5	13
14	< /AVKS 0	37	39	< /ARKS 6	12
15	< /AVKS 1	36	40	< /ARKS 7	11
16	< /AVKS 2	35	41	< /OE 1	10
17	< /AVKS 3	34	42	GND	9
18	< /AVKS 4	33	43	< /OPLED	8
19	< /AVKS 5	32	44	< /RTRG	7
20	< /AVKS 6	31	45	< /OPKEY	6
21	< /AVKS 7	30	46	< /SW-ON	5
22	< /AVKS 8	29	47	< /SN-ON	4
23	< /AVKS 9	28	48	< EX-FCU	3
24	GND	27	49	+5VE	2
25	< /ARCLK	26	50	+5VE	1

Table 2 (Function Upgrade Card - FCU)

FCU CN502	NAME	FCU CN502	NAME
1	COM1	35	COM1
2	< CPD 3	36	< CD1
3	< CPD 4	37	< CPD 11
4	< CPD 5	38	< CPD 12
5	< CPD 6	39	< CPD 13
6	< CPD 7	40	< CPD 14
7	< /CRONG	41	< CPD 15
8	CPA 10	42	< /CRAMCS0
9	< /MRD	43	N.C
10	CPA 11	44	< /FROMCS
11	CPA 9	45	N.C
12	CPA 8	46	CPA 17
13	CPA 13	47	CPA 18
14	CPA 14	48	CPA 19
15	< /MWRL	49	CPA 20
16	< BSY	50	< RAMCS
17	+5V	51	+5V
18	< /12VP	52	+12VP
19	CPA 16	53	N.C
20	CPA 15	54	N.C
21	CPA 12	55	< /MP
22	CPA 7	56	< /BYTE
23	CPA 6	57	N.C
24	CPA 5	58	< /MWRL
25	CPA 4	59	< /EXCARD
26	CPA 3	60	< /RLEP
27	CPA 2	61	< /PCNT0
28	CPA 1	62	< /PCNT1
29	CPA 0	63	< /JCSNT
30	< CPD 8	64	< CPD 8
31	< CPD 9	65	< CPD 9
32	< CPD 10	66	< CPD 10
33	< /RTCCS	67	< /RTCCS
34	COM 1	68	COM 1

Table 3 (Page Memory Card - FCU)

FCU CN503	NAME	FCU CN503	NAME
1	COM1	35	COM1
2	< DMD 3	36	< CD1
3	< DMD 4	37	< DMD 11
4	< DMD 5	38	< DMD 12
5	< DMD 6	39	< DMD 13
6	< DMD 7	40	< DMD 14
7	< /RAS 4	41	< DMD 15
8	N.C	42	< /RAS5
9	< /DMRD	43	N.C
10	N.C	44	N.C
11	DMA 9	45	N.C
12	DMA 8	46	N.C
13	N.C	47	N.C
14	N.C	48	N.C
15	< /DMWR	49	N.C
16	N.C	50	N.C
17	+5V	51	+5V
18	N.C	52	N.C
19	N.C	53	N.C
20	N.C	54	N.C
21	N.C	55	< /DCAS 1
22	DMA 7	56	< /DCAS 0
23	DMA 6	57	N.C
24	DMA 5	58	N.C
25	DMA 4	59	N.C
26	DMA 3	60	N.C
27	DMA 2	61	N.C
28	DMA 1	62	N.C
29	DMA 0	63	N.C
30	< DMD 0	64	< DMD 8
31	< DMD 1	65	< DMD 9
32	< DMD 2	66	< DMD 10
33	N.C	67	N.C
34	COM 1	68	COM 1

Table 4 (SAF/HDD Interface - FCU)

FCU CN504	NAME	FCU CN504	NAME
1	COM1	45	COM1
2	< CPD 0	46	< CPD 1
3	< CPD 2	47	< CPD 3
4	< CPD 4	48	< CPD 5
5	< CPD 6	49	< CPD 7
6	< CPD 8	50	< CPD 9
7	< CPD 10	51	< CPD 11
8	< CPD 12	52	< CPD 13
9	+5V	53	< CPD 14
10	< CPD 16	54	< /MRD
11	< DMD 15	55	< /MWRL
12	< /MWRL	56	COM1
13	CPA 1	57	CPA 2
14	CPA 3	58	CPA 4
15	+5V	59	CPA 5
16	CPA 6	60	CPA 7
17	< DMD 14	61	CPA 8
18	CPA 9	62	CPA 10
19	CPA 11	63	COM1
20	CPA 12	64	CPA 13
21	CPA 14	65	CPA 15
22	< /FROMCS	66	< /RAMCS
23	RTCCS	67	< /INTHDD
24	+12V	68	< DMD 0
25	DMD 13	69	< DMD 1
26	< DMD 2	70	< DMD 3
27	< /EXCARD	71	< DMD 4
28	< DMD 5	72	< DMD 6
29	< DMD 7	73	COM1
30	< DMD 8	74	< DMD 9
31	< DMD 10	75	< DMD 11
32	+5V	76	< /RAS 0
33	< /CAS 0	77	< /CAS 1
34	< /DMRD	78	< /DMWR
35	< DMD 12	79	< /HDCS
36	< /DMRD	80	< /RESSET
37	+5V	81	< /DMWR
38	DMA 1	82	DMA 2
39	DMA 3	83	DMA 4
40	DMA 5	84	DMA 6
41	DMA 7	85	DMA 8
42	DMA 9	86	DMA 10
43	HDDACK	87	DMA 11
44	COM 1	88	COM 1

Table 5 (CIG4 - FCU)

FCU CN505	NAME	FCU CN505	NAME
1	VTXMD	21	CPA 3
2	< VRXMD	22	CPA 2
3	COM1	23	CPA 1
4	+12V	24	CPA 0
5	< /G4CS	25	COM3
6	< /RESET	26	< CPD 7
7	COM3	27	< CPD 6
8	< /INTG4	28	< CPD 5
9	< /WAIT	29	< CPD 4
10	< /CODCS	30	< CPD 3
11	CPA 14	31	< CPD 2
12	CPA 13	32	< CPD 1
13	CPA 12	33	< CPD 0
14	CPA 10	34	< /MWRL
15	CPA 9	35	N.C
16	CPA 8	36	< /MRD
17	CPA 7	37	COM3
18	CPA 6	38	+24V
19	CPA 5	39	COM3
20	CPA 4	40	+24V

Table 6 (DIU (RS232C) - FCU)

FCU CN506	NAME	FCU CN506	NAME
1	< CPD 0	13	< CPD 6
2	< CPD 1	14	< /IOWR
3	< CPD 2	15	< CPD 7
4	< CPD 3	16	< /RST232
5	< CPD 4	17	< /IOT2
6	< CPD 5	18	< /RST232CS
7	< CPD 6	19	N.C
8	< CPD 7	20	N.C
9	< CPD 8	21	+5V
10	< CPD 9	22	N.C
11	< CPD 10	23	COM1
12	< /IORD	24	N.C

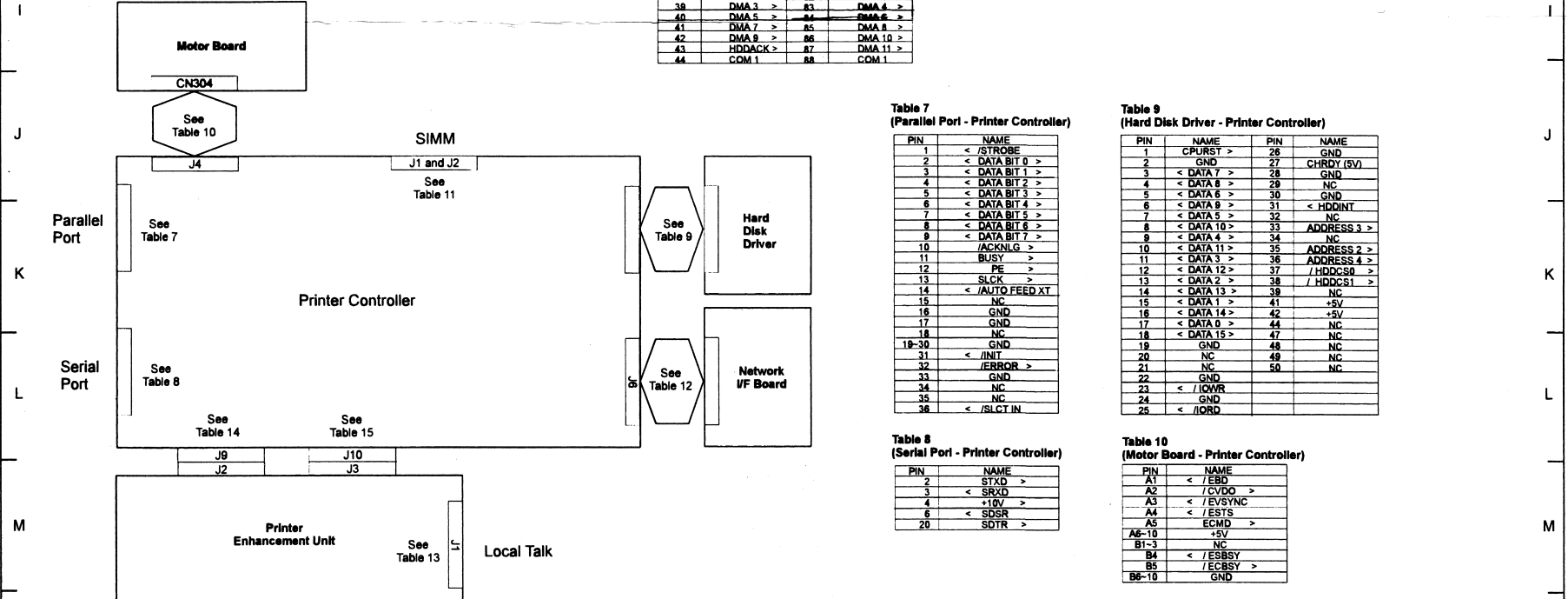


Table 7 (Parallel Port - Printer Controller)

PIN	NAME	PIN	NAME
1	< /STROBE	27	GND
2	< DATA BIT 0	28	CHRDY (SV)
3	< DATA BIT 1	29	GND
4	< DATA BIT 2	30	N.C
5	< DATA BIT 3	31	GND
6	< DATA BIT 4	32	< /HDCINT
7	< DATA BIT 5	33	ADDRESS 3
8	< DATA BIT 6	34	ADDRESS 4
9	< DATA BIT 7	35	ADDRESS 5
10	< /ACKNLG	36	ADDRESS 6
11	BUSY	37	ADDRESS 7
12	PE	38	ADDRESS 8
13	< /AUTO FEED XT	39	ADDRESS 9
14	N.C	40	ADDRESS 10
15	GND	41	ADDRESS 11
16	GND	42	ADDRESS 12
17	GND	43	ADDRESS 13
18	GND	44	ADDRESS 14
19	GND	45	ADDRESS 15
20	GND	46	ADDRESS 16
21	GND	47	ADDRESS 17
22	GND	48	ADDRESS 18
23	GND	49	ADDRESS 19
24	GND	50	ADDRESS 20
25	GND	51	ADDRESS 21
26	GND	52	ADDRESS 22

Table 8 (Serial Port - Printer Controller)

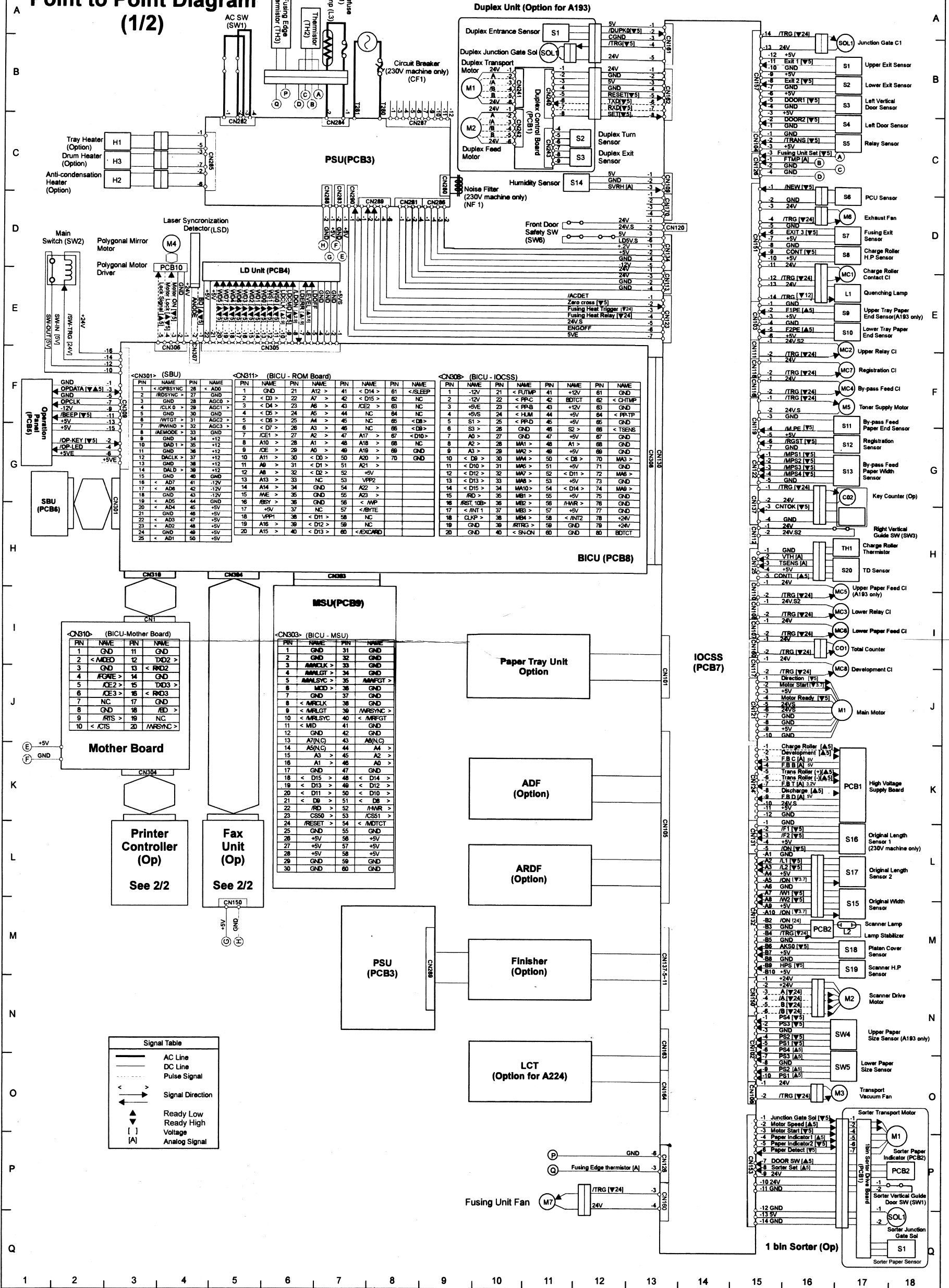
PIN	NAME	PIN	NAME
1	STXD	27	GND
2	SRXD	28	GND
3	+10V	29	GND
4	SDTR	30	GND
5	GND	31	GND
6	GND	32	GND
7	GND	33	GND
8	GND	34	GND
9	GND	35	GND
10	GND	36	GND
11	GND	37	GND
12	GND	38	GND
13	GND	39	GND
14	GND	40	GND
15	GND	41	GND
16	GND	42	GND
17	GND	43	GND
18	GND	44	GND
19	GND	45	GND
20	GND	46	GND
21	GND	47	GND
22	GND	48	GND
23	GND	49	GND
24	GND	50	GND
25	GND	51	GND
26	GND	52	GND

Table 9 (Hard Disk Driver - Printer Controller)

Pin #			
PIN	NAME	PIN	NAME
A1	< DATA16	B1	< DATA17
A2	< DATA19	B2	< DATA20
A3	< DATA22	B3	< DATA23
A4	< DATA25	B4	< DATA26
A5	GND	B5	< SCCCS
A6	< ADDRESS0	B6	< ADDRESS1
A7	< ADDRESS2	B7	< ADDRESS3
A8	< ADDRESS6	B8	< ADDRESS9
A9	+5V	B9	GND
A10	< ADDRESS10	B10	< ADDRESS12
A11	< ADDRESS13	B11	< ADDRESS15
A12	< ADDRESS16	B12	+5V
A13	< ADDRESS17	B13	< ADDRESS18
A14	< ADDRESS20	B14	< ADDRESS21
A15	< ADDRESS23	B15	< ADDRESS24
A16	GND	B16	< ADDRESS25
A17	< ADDRESS27	B17	< ADDRESS28
A18	< ADDRESS30	B18	< ADDRESS31
A19	GND	B19	< /ALE
A20	< /BLAST	B20	< /WR
A21	+5V	B21	GND
A22	< /ARAMM1 >	B22	< /ARAME0
A23	AMA 1 >	B23	AMA 2 >
A24	AMA 4 >	B24	AMA 5 >
A25	AMA 7 >	B25	AMA 8 >
A26	AMA 10 >	B26	< ALE
A27	< ACAS1 >	B27	< ACAS2 >
A28	+5V	B28	GND
A29	+5V	B29	< /ARAS.0
A30	< /ARAS.5 >	B30	< /ARAS.3 >
A31	< /ARAS.6 >	B31	< /ARAS.4 >
A32	+5V	B32	GND

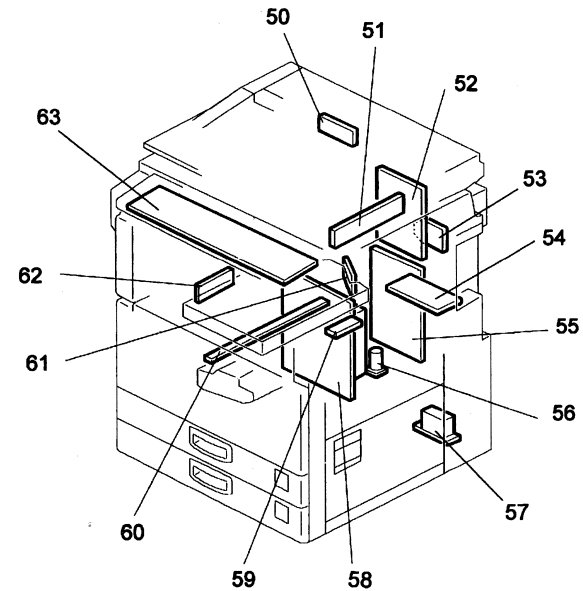
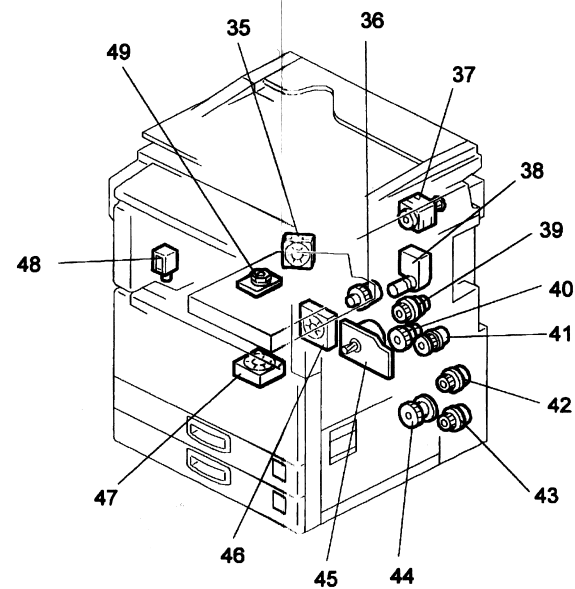
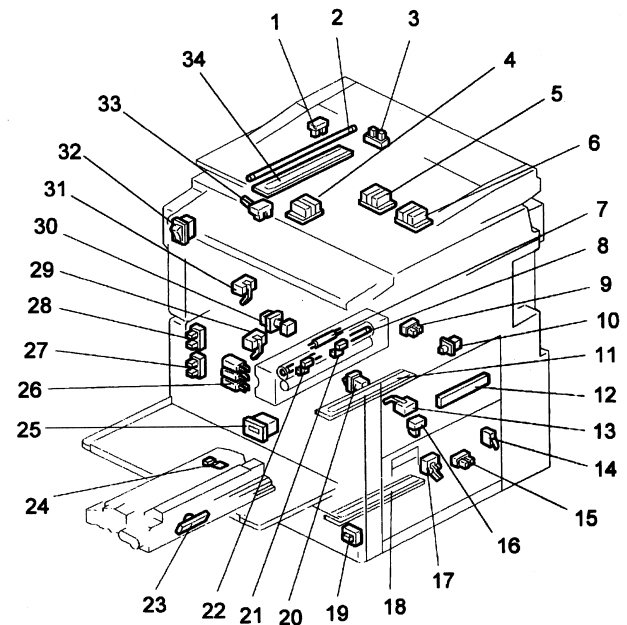
A193 and A224 Point to Point Diagram (1/2)

(Ver. 2)



ELECTRICAL COMPONENT LAYOUT
Copier (A224)

Rev. 7/15/97



Copier

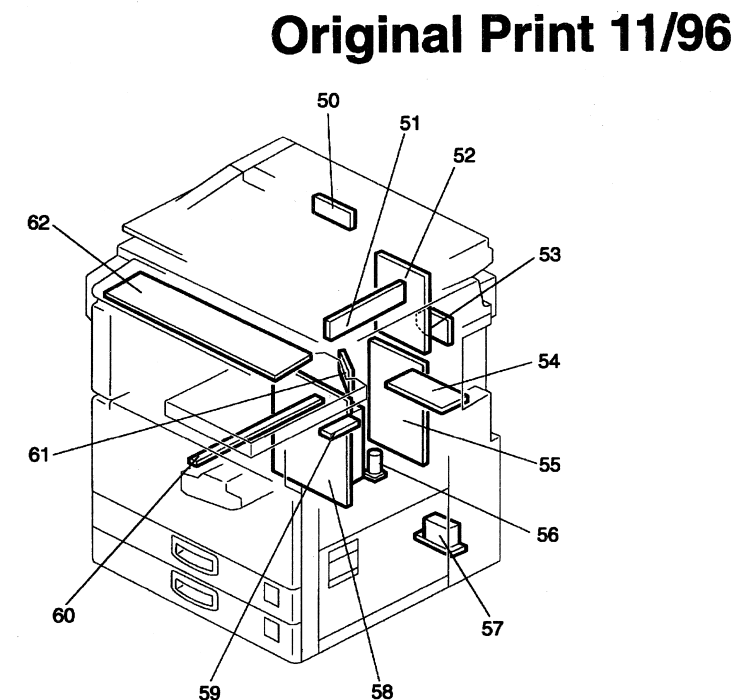
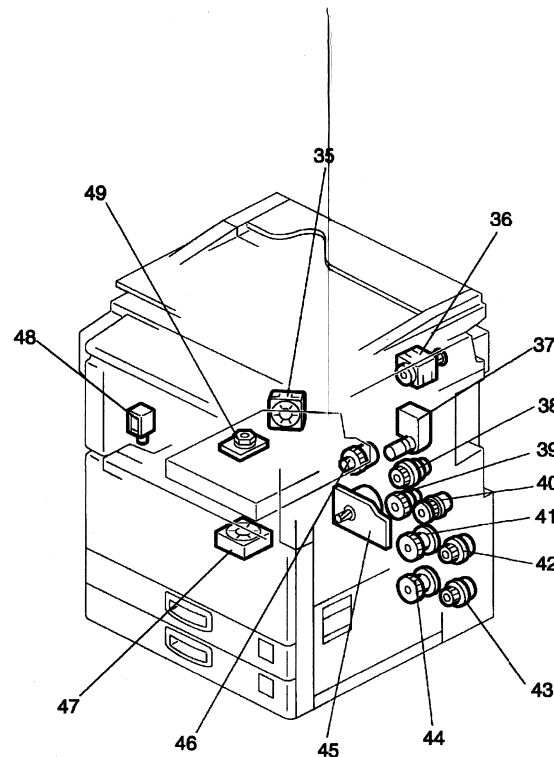
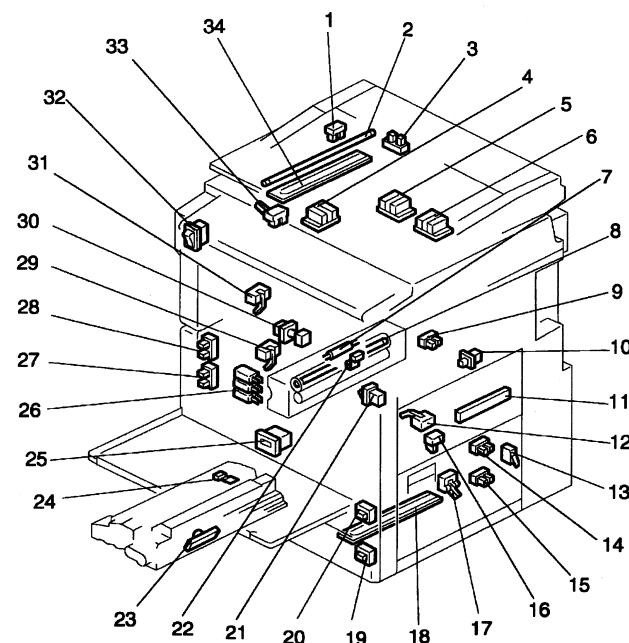
Symbol	Index No.	Description	P to P (2/2)
Printed Circuit Boards			
PCB1	54	High Voltage Supply Board	K17
PCB2	50	Lamp Stabilizer	M16
PCB3	58	PSU	C7
PCB4	61	LD Unit	E5
PCB5	63	Operation Panel	F1
PCB6	51	SBU	H1
PCB7	55	IOCSS	I14
PCB8	52	BICU	H12
PCB9	53	MSU	I6
PCB10	62	Polygon Motor Driver (A224 only)	E3
Motors			
M1	45	Main	J17
M2	37	Scanner Drive	N17
M3	47	Transport Vacuum Fan	O17
M4	49	Polygonal Mirror	D4
M5	38	Toner Supply	F17
M6	35	Exhaust Fan	D17
M7	46	Fusing Unit Fan (A224 only)	P11
Sensors			
S1	33	Upper Exit	B17
S2	31	Lower Exit	B17
S3	28	Left Vertical Door	B17
S4	27	Left Door	C17
S5	17	Relay	C17
S6	10	PCU	C17
S7	29	Fusing Exit	D17
S8	9	Charge Roller H.P.	D17
S9	—	Upper Tray Paper End (A193 only)	E17
S10	15	Lower Tray Paper End	E17
S11	16	By-pass Feed Paper End	F17
S12	13	Registration	G17
S13	12	By-pass Feed Paper Width	G17
S14	59	Humidity	C11
S15	4	Original Width	L17
S16	5	Original Length-1	L17
S17	6	Original Length-2	L17
S18	3	Platen Cover	M17
S19	1	Scanner H.P.	M17
S20	23	Toner Density (TD)	H17
Switches			
SW1	20	AC	B6

Symbol	Index No.	Description	P to P (1/2)
SW2	32	Main	D2
SW3	14	Right Vertical Guide	H17
SW4	—	Upper Paper Size (A193 only)	N17
SW5	19	Lower Paper Size	O17
SW6	26	Front Door Safety	D11
Magnetic Clutches			
MC1	36	Charge Roller Contact	E17
MC2	42	Upper Relay	E17
MC3	43	Lower Relay	I17
MC4	41	By-pass Feed	F17
MC5	—	Upper Paper Feed (A193 only)	I17
MC6	44	Lower Paper Feed	I17
MC7	40	Registration	F17
MC8	39	Development	J17
Solenoids			
SOL1	48	Junction Gate	B17
Lamps			
L1	60	Quenching	E17
L2	2	Scanner	M17
L3	8	Fusing	B7
Heaters			
H1	18	Tray (option)	C3
H2	34	Anti-condensation (option)	C3
H3	11	Drum (option)	C3
Thermistors			
TH1	24	Charge Roller	H17
TH2	21	Fusing	B6
TH3	22	Fusing Edge (A224 only)	B6
Thermofuses			
TF1	7	Fusing	B7
Counters			
CO1	25	Total	I17
CO2	—	Key (option)	G17
Others			
LSD1	30	Laser Synchronization Detector	D4
NF	56	Noise Filter (230V machine only)	C10
CB	57	Circuit Breaker (230V machine only)	B8

(A193)

ELECTRICAL COMPONENT LAYOUT

Copier



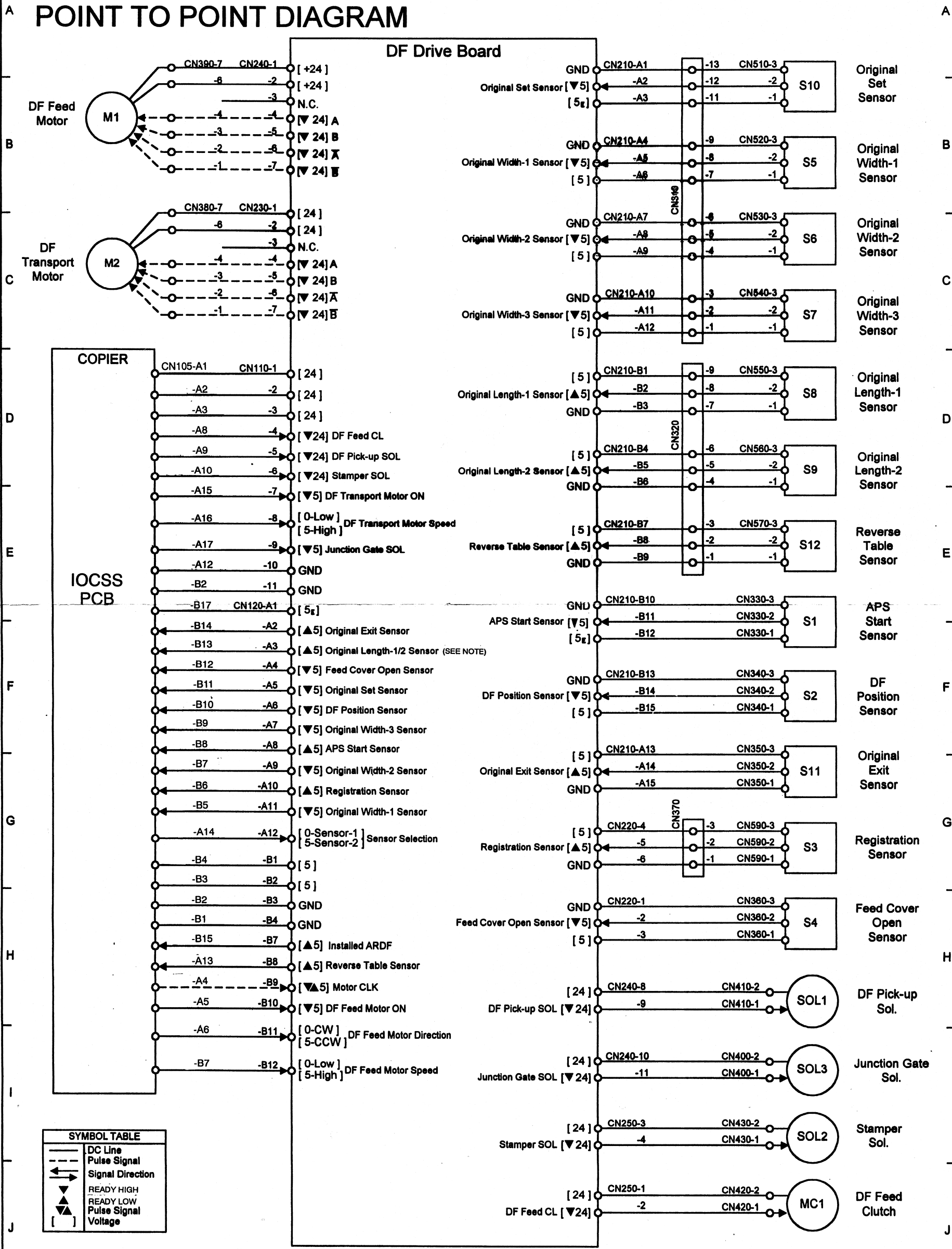
Copier

Symbol	Index No.	Description	P to P (1/2)
Printed Circuit Boards			
PCB1	54	High Voltage Supply Board	K17
PCB2	50	Lamp Stabilizer	M16
PCB3	58	PSU	C7
PCB4	61	LD Unit	E5
PCB5	62	Operation Panel	F1
PCB6	51	SBU	H1
PCB7	55	IOCSS	I14
PCB8	52	BICU	H12
PCB9	53	MSU	I6
Motors			
M1	45	Main	I17
M2	36	Scanner Drive	N17
M3	47	Transport Vacuum Fan	O17
M4	49	Polygonal Mirror	D4
M5	37	Toner Supply	F17
M6	35	Exhaust Fan	D17
Sensors			
S1	33	Upper Exit	B17
S2	31	Lower Exit	B17
S3	28	Left Vertical Door	B17
S4	27	Left Door	C17
S5	17	Relay	C17
S6	10	PCU	C17
S7	29	Fusing Exit	D17
S8	9	Charge Roller H.P.	D17
S9	14	Upper Tray Paper End	E17
S10	15	Lower Tray Paper End	E17
S11	16	By-pass Feed Paper End	F17
S12	12	Registration	G17
S13	11	By-pass Feed Paper Width	G17
S14	59	Humidity	C11
S15	4	Original Width	L17
S16	5	Original Length-1	L17
S17	6	Original Length-2	L17
S18	3	Platen Cover	M17
S19	1	Scanner H.P.	M17
S20	23	Toner Density (TD)	H17
Switches			
SW1	21	AC	B6
SW2	32	Main	D2
SW3	13	Right Vertical Guide	H17

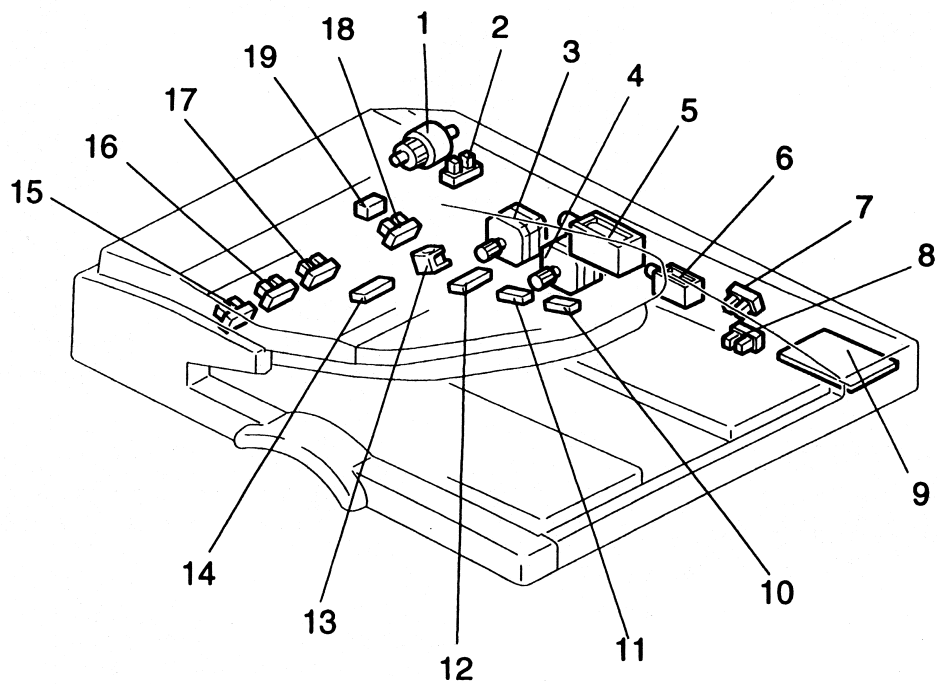
Symbol	Index No.	Description	P to P (1/2)
SW4	20	Upper Paper Size	N17
SW5	19	Lower Paper Size	O17
SW6	26	Front Door Safety	D11
Magnetic Clutches			
MC1	46	Charge Roller Contact	E17
MC2	42	Upper Relay	E17
MC3	43	Lower Relay	I17
MC4	40	By-pass Feed	F17
MC5	41	Upper Paper Feed	I17
MC6	44	Lower Paper Feed	I17
MC7	39	Registration	F17
MC8	38	Development	J17
Solenoids			
SOL1	48	Junction Gate	B17
Lamps			
L1	60	Quenching	E17
L2	2	Scanner	M17
L3	8	Fusing	B7
Heaters			
H1	18	Tray (option)	C4
H2	34	Anti-condensation (option)	D4
Thermistors			
TH1	24	Charge Roller	H17
TH2	22	Fusing	B6
Thermofuses			
TF1	7	Fusing	B7
Counters			
CO1	25	Total	I17
CO2	---	Key (option)	G17
Others			
LSD1	30	Laser Synchronization Detector	D4
NF	56	Noise Filter (230V machine only)	C10
CB	57	Circuit Breaker (230V machine only)	B8

AUTO REVERSE DOCUMENT FEEDER (A661)

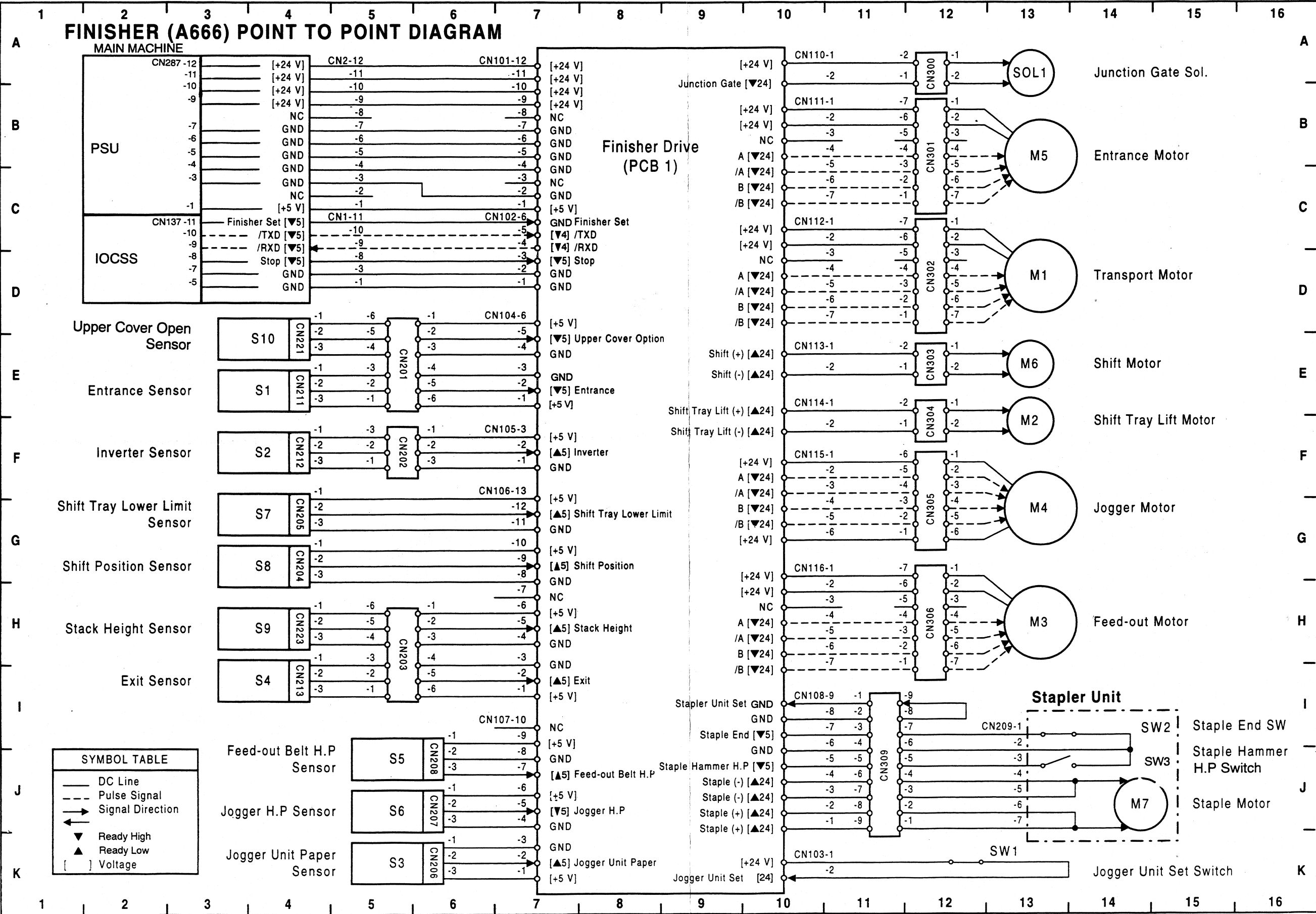
POINT TO POINT DIAGRAM



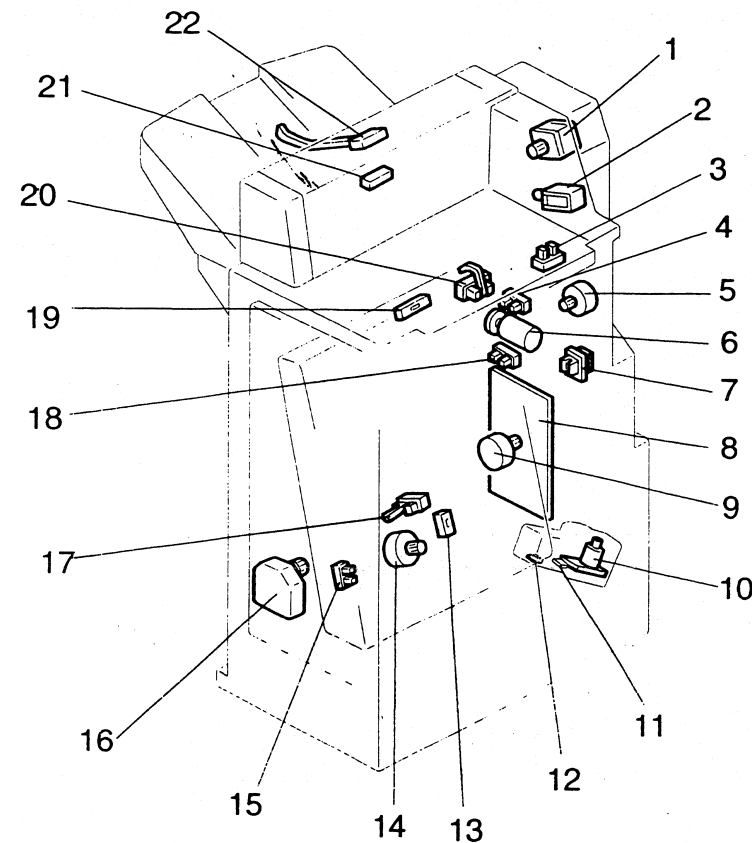
AUTO REVERSE DOCUMENT FEEDER (A661)



Symbol	Index No.	Name	P to P
Motors			
M1	4	DF Feed	B1
M2	3	DF Transport	C1
Sensors			
S1	8	APS Start	E7
S2	7	DF Position	F7
S3	19	Registration	G7
S4	2	Feed Cover Open Sensor	H7
S5	17	Original Width - 1	B7
S6	16	Original Width - 2	C7
S7	15	Original Width - 3	C7
S8	11	Original Length - 1	D7
S9	10	Original Length - 2	D7
S10	18	Original Set	B7
S11	14	Original Exit	G7
S12	12	Reverse Table	E7
Solenoids			
SOL1	5	DF Pick-up	H7
SOL2	13	Stamper	I7
SOL3	6	Junction Gate	I7
Clutches			
MC1	1	DF Feed	J7
PCBs			
PCB1	9	DF Drive	A4

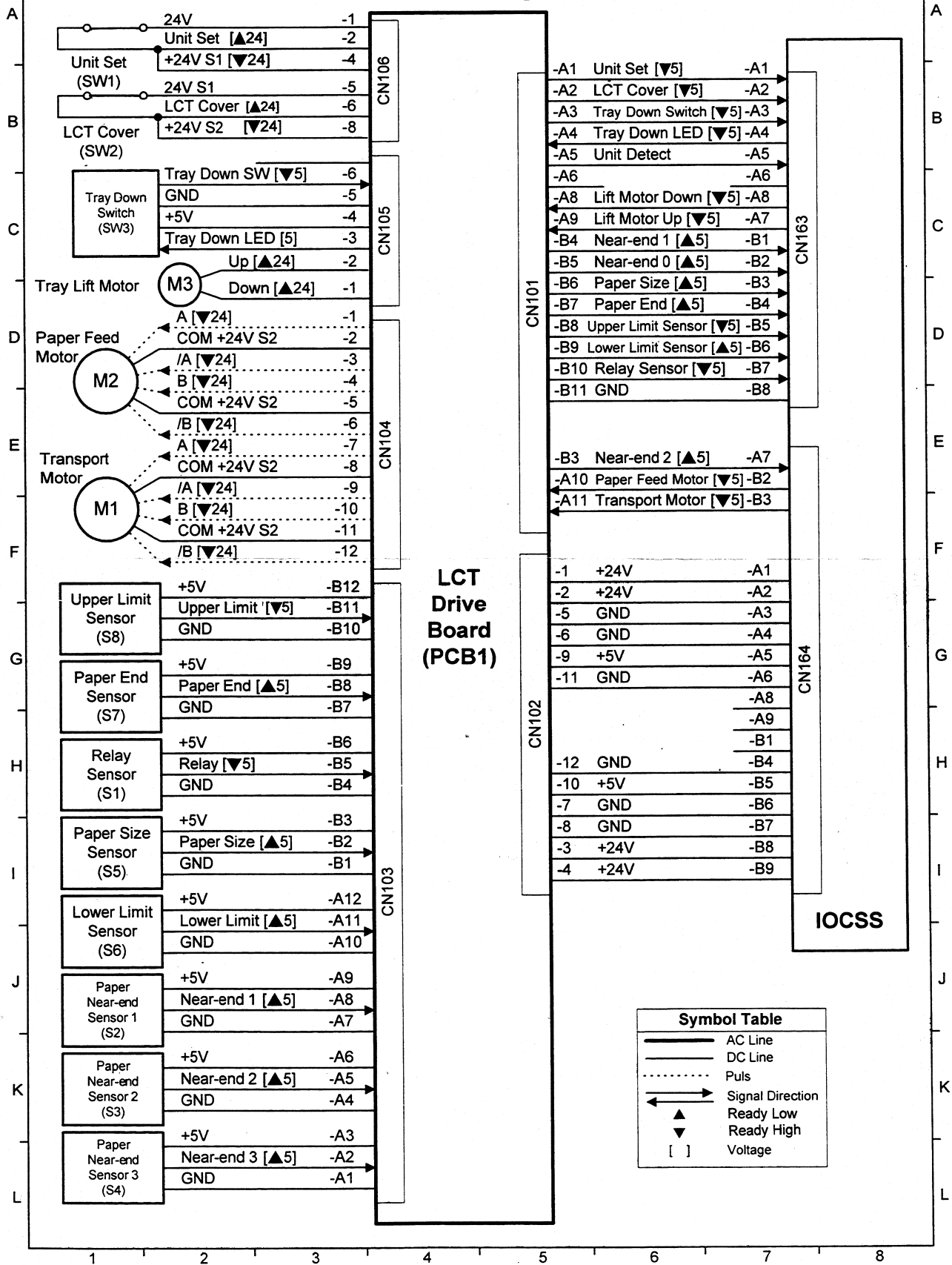


ELECTRICAL COMPONENT LAYOUT

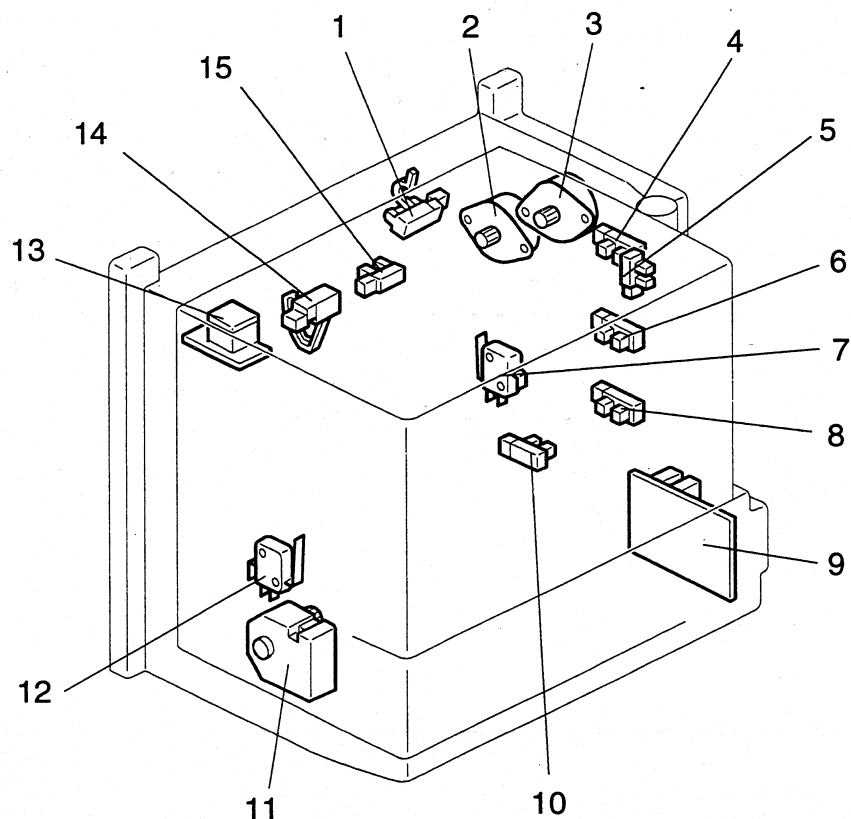


ID#	Symbol Name	Function	Index No.
Motors			
1	M1	Transport	Drives the transport rollers and the exit roller.
16	M2	Shift Tray Lift	Moves the shift tray up or down.
9	M3	Feed-out	Drives the feed-out belt.
14	M4	Jogger	Moves the jogger fence.
5	M5	Entrance	Drives the entrance roller.
6	M6	Shift	Moves the shift tray forward or rearward
10	M7	Staple	Drives the staple hammer.
Sensors			
20	S1	Entrance	Detects the copy paper entering the finisher and is used to detect misfeeds.
19	S2	Inverter	Detects the trailing edge of the paper to change the rotation direction of the transport motor
13	S3	Jogger Unit Paper	Detects the paper in the jogger unit and is used to detect misfeeds.
21	S4	Exit	Detects misfeeds in the exit area.
17	S5	Feed-out Belt HP	Detects the home position of the feed-out belt.
15	S6	Jogger HP	Detects the jogger home position.
18	S7	Shift Tray Lower Limit	Detects the lower limit position of the shift tray.
4	S8	Shift Tray Position	Detects the stop position of the shift motor.
22	S9	Stack Height	Detects when the copy stack is proper height.
3	S10	Upper Cover Open	Detects when the upper cover is opened.
Switches			
7	SW1	Jogger Unit Set	Cuts the +24V power within the finisher when the jogger unit is pulled out.
12	SW2	Staple End	Detects when the staples have run out.
11	SW3	Staple Hammer HP	Detects the home position of the staple hammer.
Solenoid			
2	SOL1	Junction Gate	Drives the junction gate.
PCBs			
8	PCB1	Finisher Drive	Controls overall finisher operation.

LCT A667 Point to Point Diagram

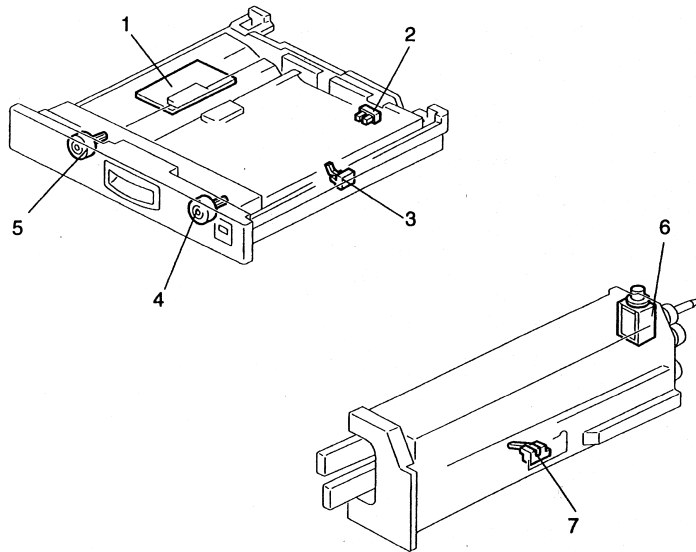


ELECTRICAL COMPONENT LAYOUT LCT (A667)



Symbol	Index No.	Name	P to P
Printed Circuit Board			
PCB 1	9	LCT Drive	F4
Motors			
M 1	2	Transport	F1
M 2	3	Paper Feed	D1
M 3	11	Tray Lift	D1
Sensors			
S 1	1	Relay	H1
S 2	8	Paper Near-end 1	J1
S 3	6	Paper Near-end 2	K1
S 4	4	Paper Near-end 3	L1
S 5	5	Paper Size	I1
S 6	10	Lower Limit	I1
S 7	14	Paper End	G1
S 8	15	Upper Limit	G1
Switches			
SW 1	7	Unit Set	A1
SW 2	12	LCT Cover	B1
SW 3	13	Tray Down	C1

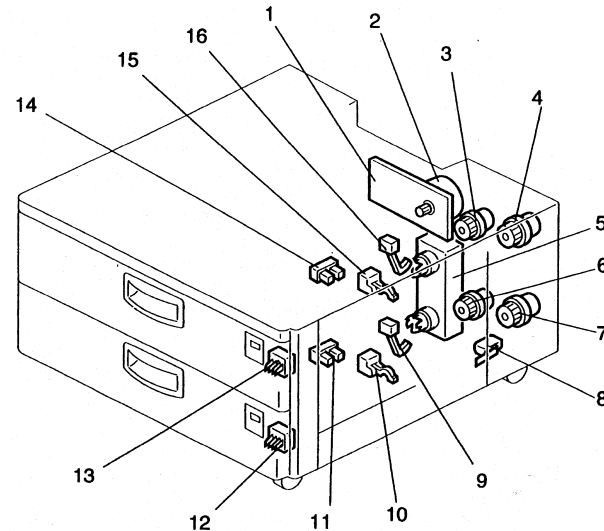
Duplex (G694)



Duplex (G694)

Symbol	Index No.	Description	P to P (1/2)
Motors			
M1	5	Duplex Transport	B9
M2	4	Duplex Feed	C9
Sensors			
S1	7	Duplex Entrance	B11
S2	2	Duplex Turn	C12
S3	3	Duplex Exit	C12
Solenoid			
SOL1	6	Duplex Junction Gate Control	B11
PCBs			
PCB1	1	Duplex Control	C11

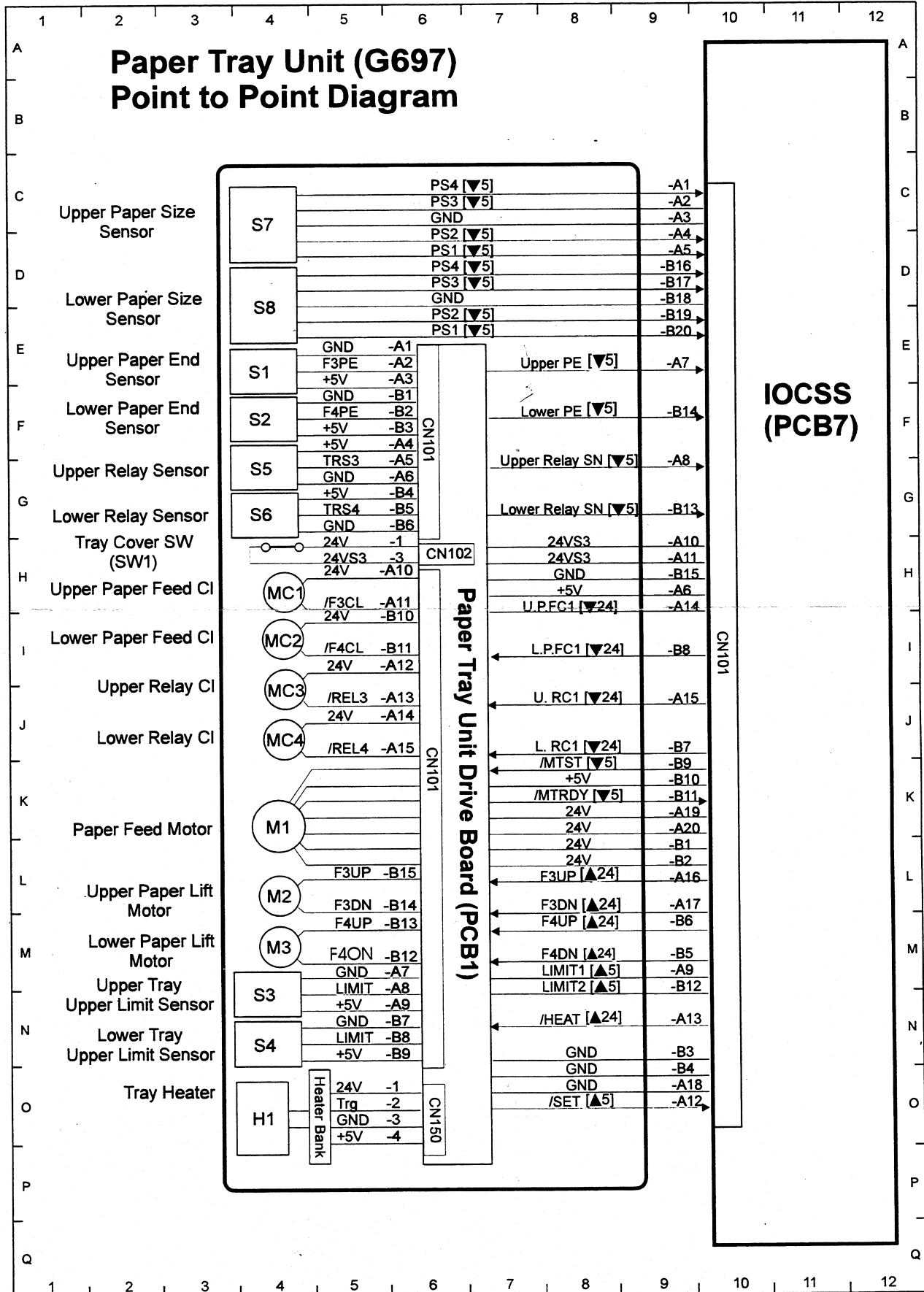
Paper Tray Unit (G697)



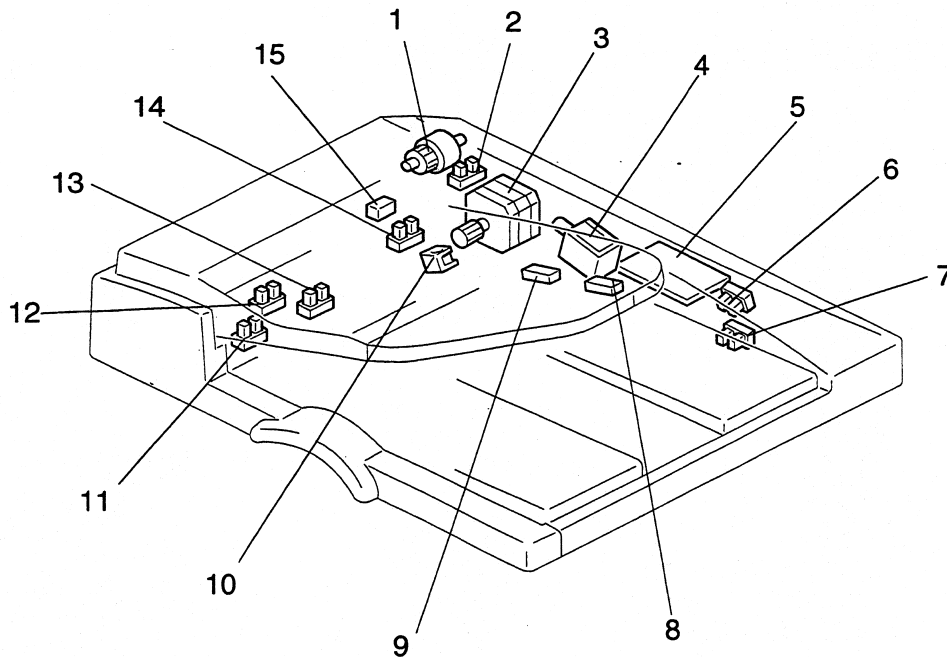
Paper Tray Unit (G697)

Symbol	Index. No.	Description	P to P (1/2)
Motors			
M1	2	Paper Feed	L9
M2	5	Upper Lift	L9
M3	5	Lower Lift	M9
Sensors			
S1	16	Upper Paper End	J9
S2	9	Lower Paper End	J9
S3	14	Upper Tray Upper Limit	M9
S4	11	Lower Tray Upper Limit	M9
S5	15	Upper Relay	J9
S6	10	Lower Relay	J9
S7	12	Upper Paper Size	I9
S8	13	Lower Paper Size	I9
Clutches			
MC1	3	Upper Paper Feed	K9
MC2	6	Lower Paper Feed	K9
MC3	4	Upper Relay	K9
MC4	7	Lower Relay	L9
PCBs			
PCB1	1	Paper Tray Unit Drive	K11

Paper Tray Unit (G697) **Point to Point Diagram**



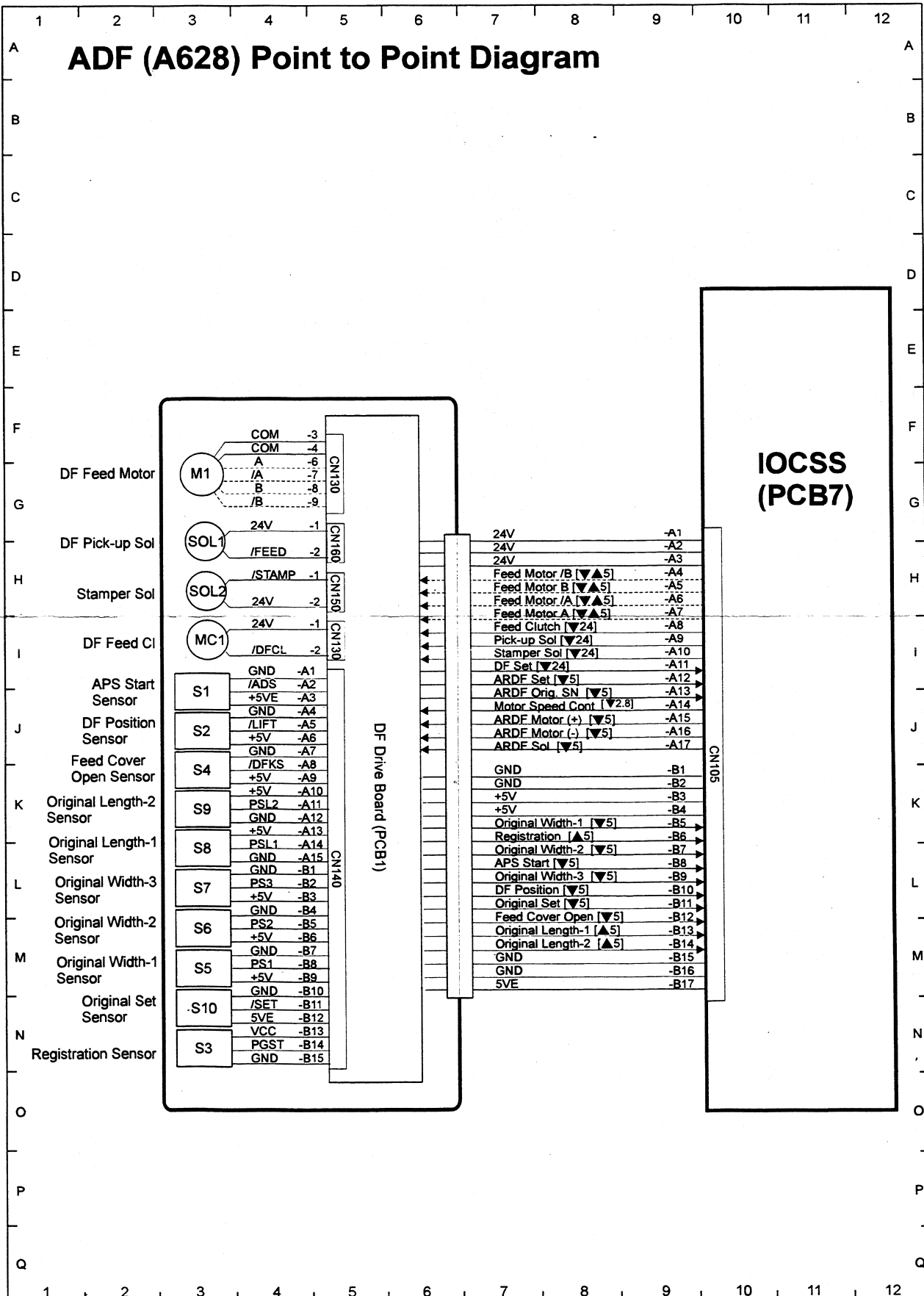
Auto Document Feeder (A628)



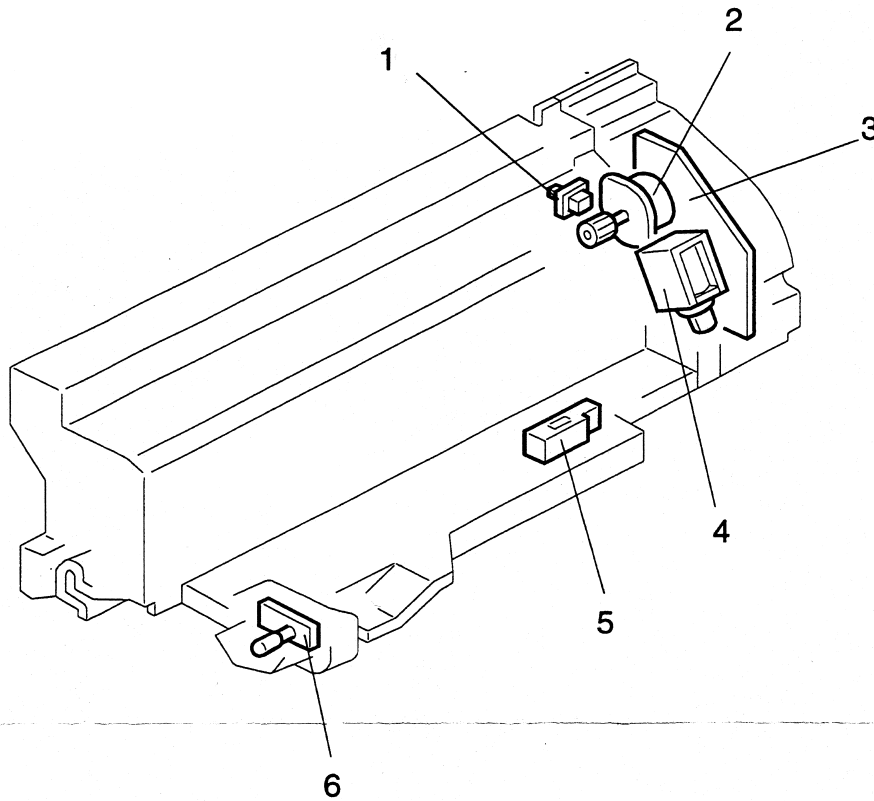
Auto Document Feeder (A628)

Symbol	Index No.	Description	P to P (1/2)
Motors			
S1	3	DF Feed	N6
Sensors			
S1	7	APS Start	O6
S2	6	DF Position	O6
S3	5	Registration	Q6
S4	2	Feed Cover Open Sensor	O6
S5	13	Original Width - 1	P6
S6	12	Original Width - 2	P6
S7	11	Original Width - 3	P6
S8	9	Original Length - 1	P6
S9	8	Original Length - 2	P6
S10	14	Original Set	Q6
Solenoids			
SOL1	4	DF Pick-up	N6
SOL2	10	Stamper	N6
Clutches			
MC1	1	DF Feed	N6
PCBs			
PCB1	5	DF Drive	O9

ADF (A628) Point to Point Diagram



1 Bin Sorter (A629)



1 Bin Sorter (A629)

Symbol	Index. No.	Description	P to P (1/2)
Motors			
M1	2	Sorter Transport	O18
Sensors			
S1	5	Sorter Paper	Q18
Switches			
SW1	1	Sorter Vertical Guide Door	P18
Solenoid			
SOL1	4	Sorter Junction Gate	Q18
PCBs			
PCB1	3	Sorter Sorter Drive	P17
PCB2	6	Sorter Paper Indicator	P18