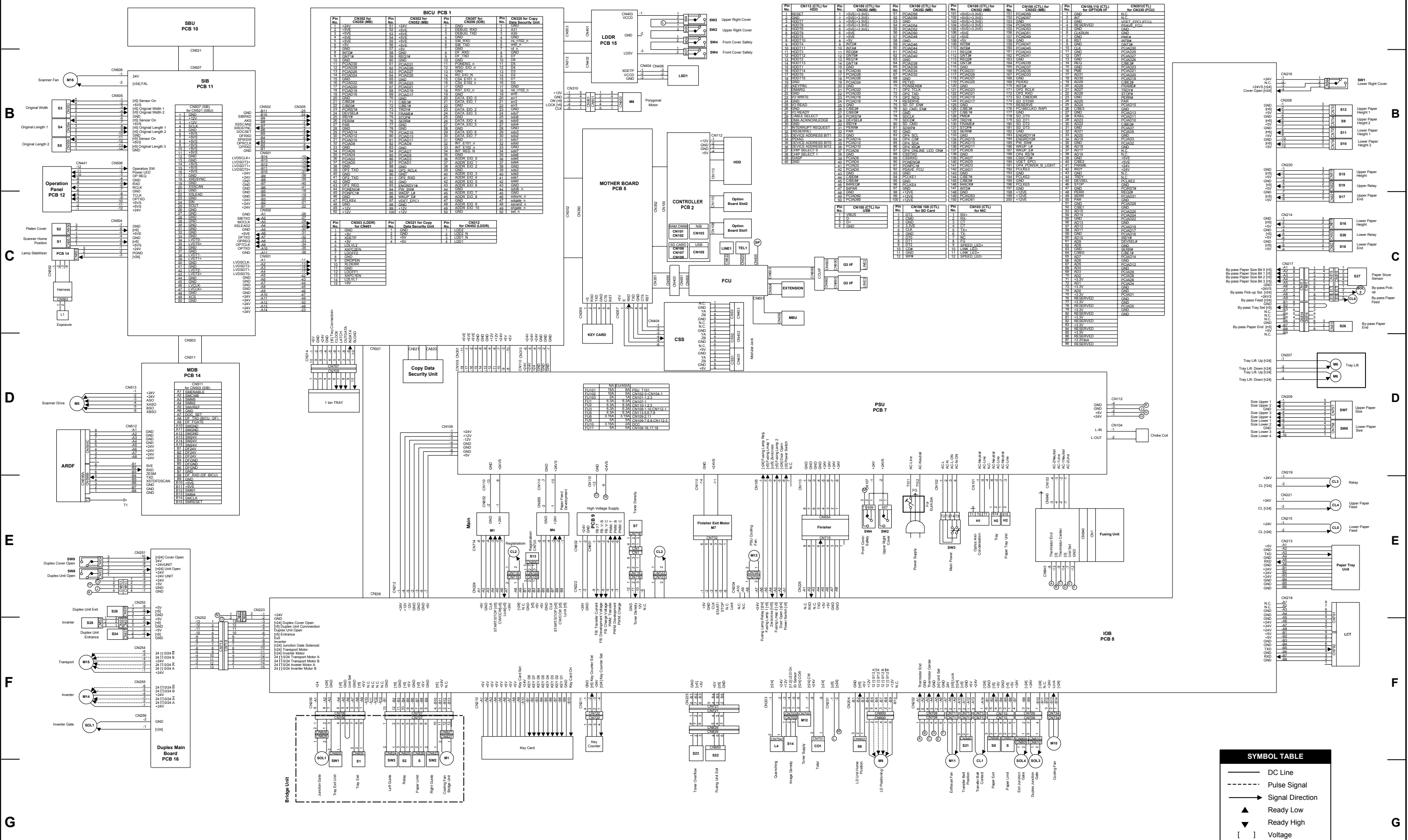


# COPIER (B291/B295/B296/B297) Point to Point Diagram

A

A

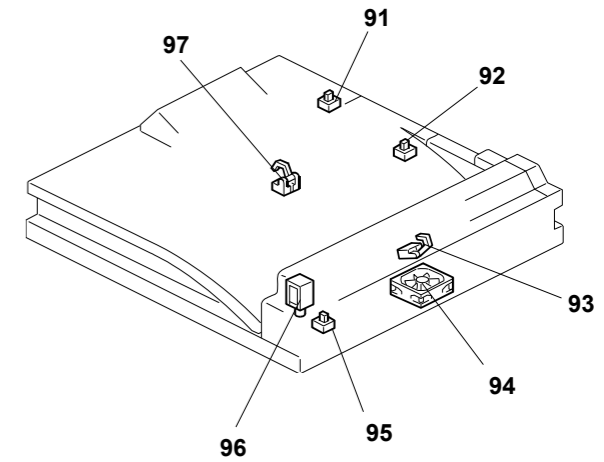
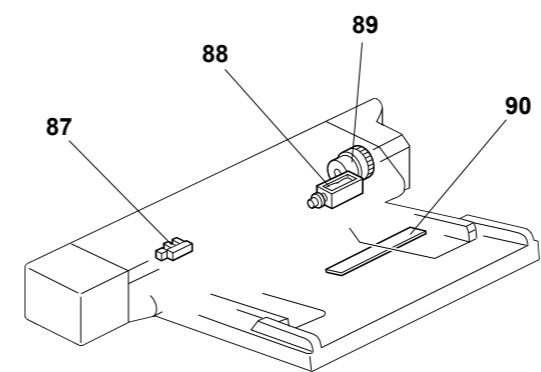
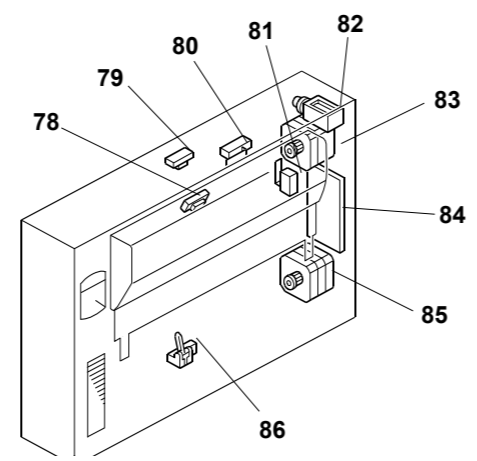
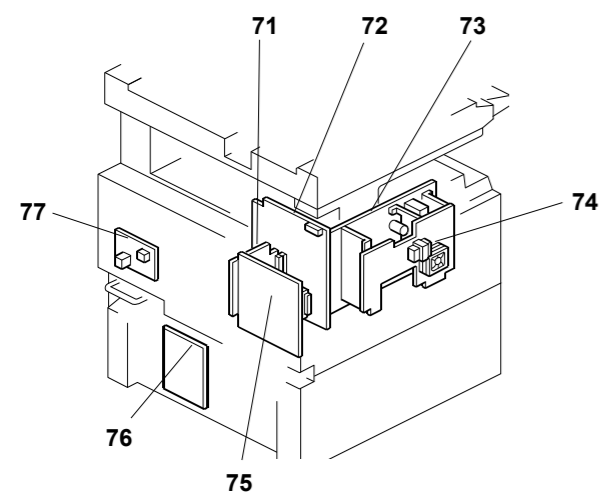
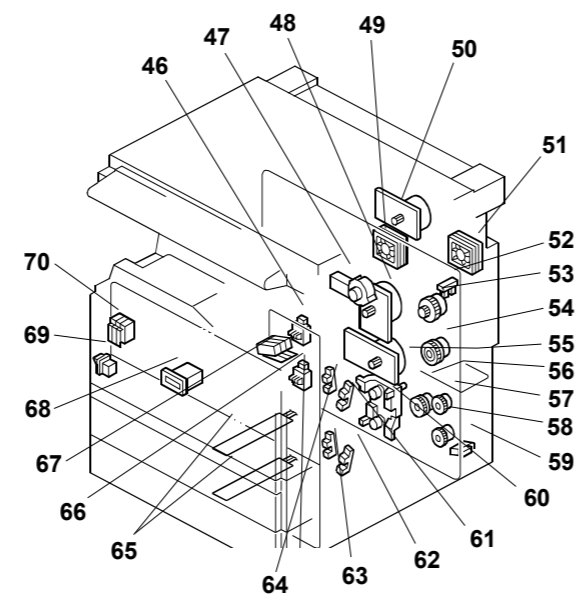
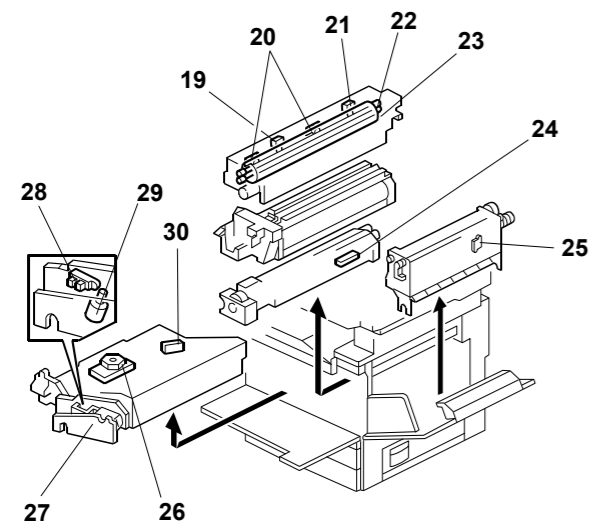
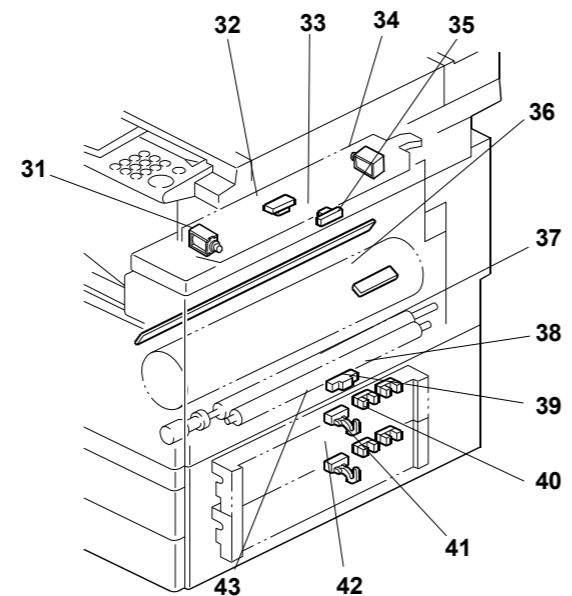
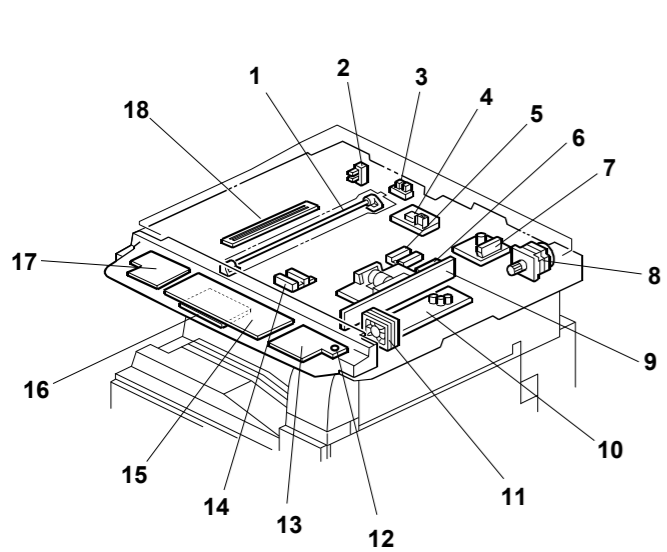


SYMBOL TABLE	
—	DC Line
- - - -	Pulse Signal
→	Signal Direction
▲	Ready Low
▼	Ready High
[ ]	Voltage

G

G

# COPIER (B291/B295/B296/B297)/BRIDGE UNIT (B538) ELECTRICAL COMPONENT LAYOUT



## COPIER (B291/B295/B296/B297)

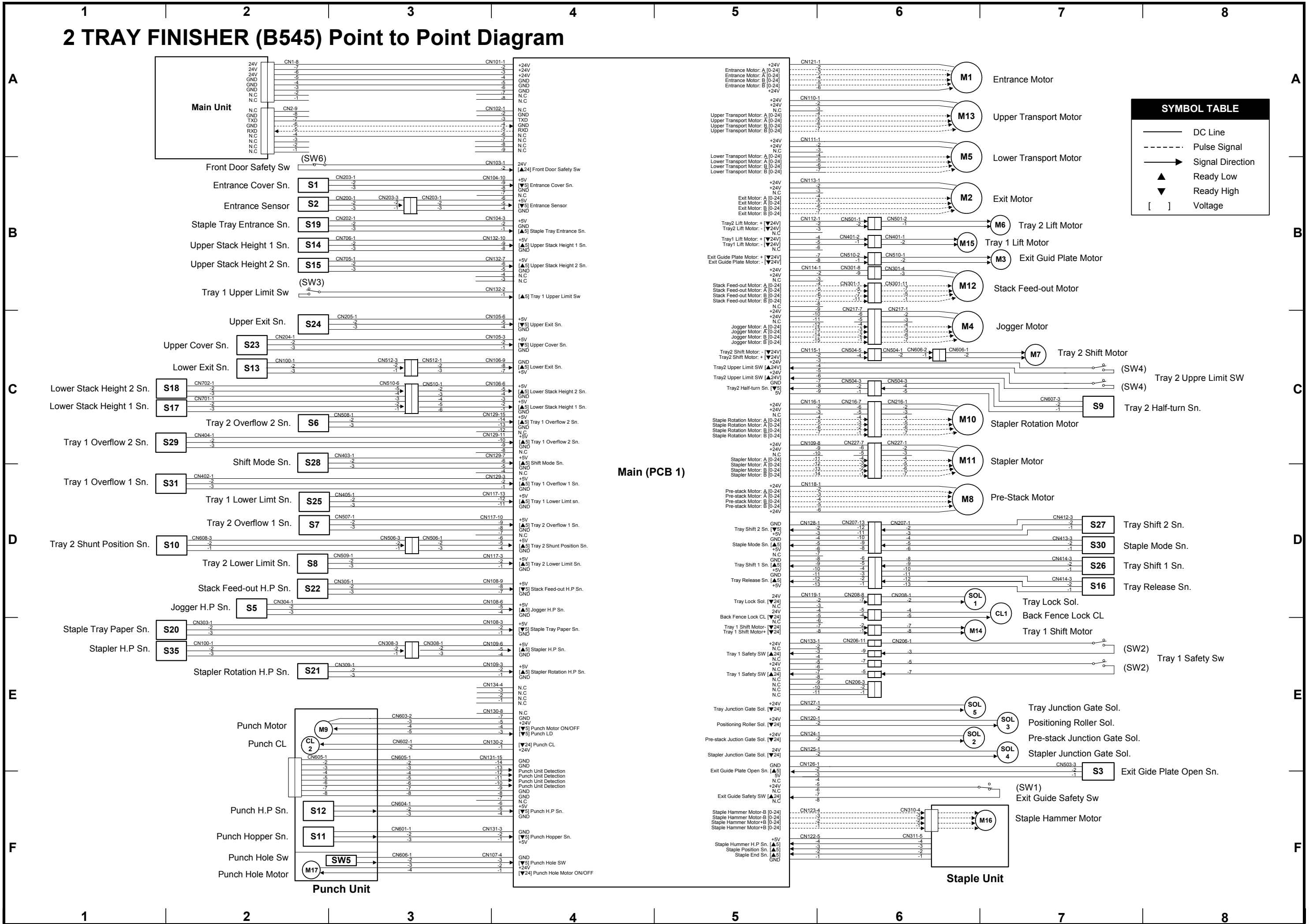
Symbol	Index No.	Description	P to P
<b>Printed Circuit Board</b>			
PCB1	72	BICU (Base Engine & Image Control Unit)	A4
PCB2	75	Controller	B5
PCB3	13	Operation Panel (Right)	(B1)
PCB4	17	Operation Panel (Left)	(B1)
PCB5	71	Mother Board	B5
PCB7	73	PSU (Power Supply Unit)	D8
PCB8	76	IOB (Input/Output Board)	F8
PCB9	77	High Voltage Supply	E5
PCB10	9	SBU (Sensor Board Unit)	A2
PCB11	10	SIB (Scanner Interface Board)	B2
PCB12	16	Operation Panel	B1
PCB13	7	MDB (Motor Drive Board)	D2
PCB14	4	Lamp Stabilizer	C1
PCB15	27	LDDR (Laser Diode Driver)	A5
PCB16	84	Duplex Main	F2
PCB17	15	LCD	(B1)
<b>Motors</b>			
M1	48	Main	E4
M4	55	Paper Feed and Development	E4
M5	8	Scanner Drive	D1
M6	60	Tray lift	D10
M7	50	Fusing Exit	E6
M8	26	Polygonal Mirror	B5
M9	29	LD Positioning	F7
M10	49	Cooling Fan	F8
M11	51	Exhaust Fan	F7
M12	47	Toner Supply	F6
M13	74	PSU Cooling Fan	E6
M14	83	Inverter	F1
M15	85	Transport	F1
M16	11	Scanner Fan	B1
<b>Solenoids</b>			
SOL1	82	Inverter Gate	F1
SOL2	88	Pick-up	C10
SOL3	31	Duplex Junction Gate	F8
SOL4	34	Exit Junction Gate	F8
<b>Lamps</b>			
L1	1	Exposure	C1
L2	22	Fusing (end)	(E8)
L3	23	Fusing (center)	(E8)
L4	35	Quenching	F6
<b>Heaters</b>			
H1	18	Optics Anti-condensation (option)	E7
H2	65	Tray (option)	E8
<b>Thermistors</b>			
TH1	19	Fusing (center)	(E8)
TH2	21	Fusing (end)	(E8)
<b>Thermostat</b>			
TS1	20	Fusing	(E8)
<b>Counter</b>			
CO1	68	Total	F6
<b>Others</b>			
LSD1	30	Laser Synchronization Detector	B5
-	-	HDD	B6

Symbol	Index No.	Description	P to P
<b>Sensors</b>			
S1	2	Scanner Home Position	C1
S2	3	Platen Cover	C1
S3	14	Original Width	B1
S4	5	Original Length 1	B1
S5	6	Original Length 2	B1
S6	28	LD Unit Home Position	F7
S7	24	Toner Density (TD)	E5
S8	32	Paper Exit	F8
S9	61	Upper Paper Height 2	B10
S10	62	Lower Paper Height 2	B10
S11	63	Lower Paper Height 1	B10
S12	64	Upper Paper Height 1	B10
S13	37	Registration	E4
S14	36	Image Density (ID)	F6
S15	38	Upper Paper Height	B10
S16	40	Lower Paper Height	C10
S17	39	Upper Paper End	C10
S18	41	Lower Paper End	C10
S19	43	Upper Relay	B10
S20	42	Lower Relay	C10
S21	52	Transfer Belt Position	F7
S22	33	Fusing Unit Exit	F6
S23	25	Toner Overflow	F5
S24	79	Duplex Unit Entrance	F1
S25	86	Duplex Unit Exit	E1
S26	87	Paper End	C10
S27	90	Paper Size	C10
S28	78	Inverter	F1
<b>Switches</b>			
SW1	59	Lower Right Cover	B10
SW2	67	Upper Right Cover	A5
SW3	69	Main Power	E7
SW4	70	Front Cover Safety	A5
SW5	12	Operation Switch	(B1)
SW6	81	Duplex Unit	E1
SW7	46	Upper Paper Size	D10
SW8	66	Lower Paper Size	D10
SW9	80	Duplex Cover Open	E1
<b>Magnetic Clutches</b>			
CL1	53	Transfer Belt Contact	F7
CL2	54	Registration	E4
CL3	56	Relay	E10
CL4	57	Upper Paper Feed	E10
CL5	58	Lower Paper Feed	E10
CL6	89	Paper Feed	C10

## BRIDGE UNIT (B538)

Symbol	Index No.	Description	P to P
<b>Motors</b>			
M1	94	Cooling Fan	F4
<b>Sensors</b>			
S1	93	Tray Exit	F3
S2	97	Relay	F3
<b>Switches</b>			
SW1	95	Tray Exit Unit	F3
SW2	92	Right Guide	F4
SW3	91	Left Guide	F3
<b>Solenoid</b>			
SOL1	96	Junction Gate	F3

# 2 TRAY FINISHER (B545) Point to Point Diagram



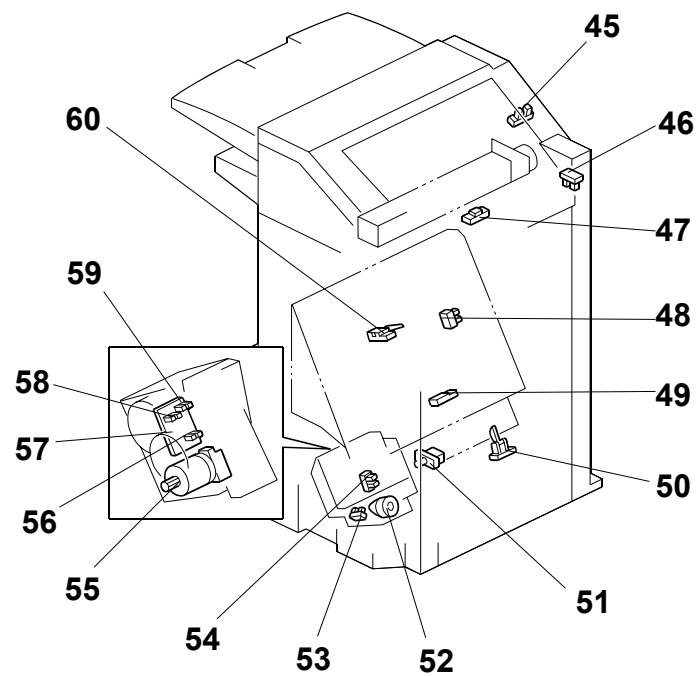
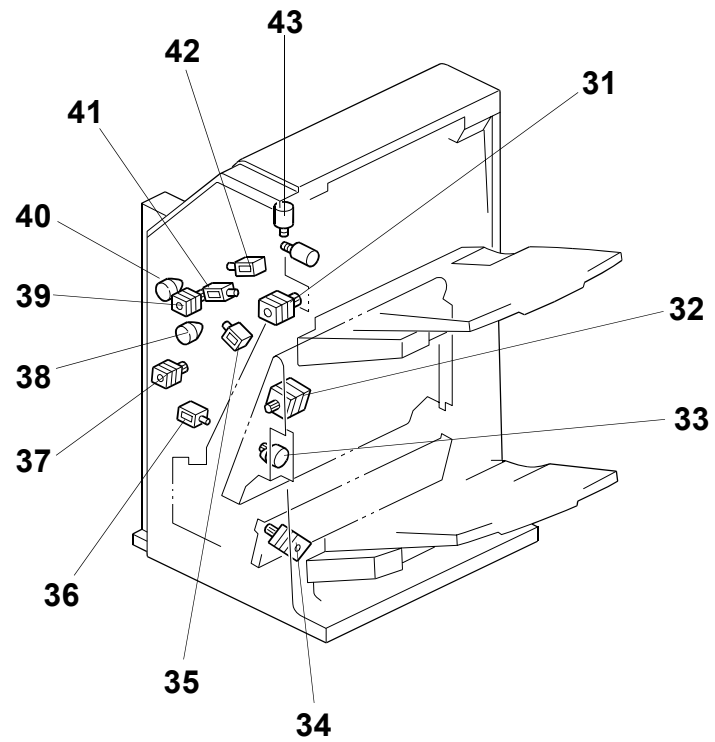
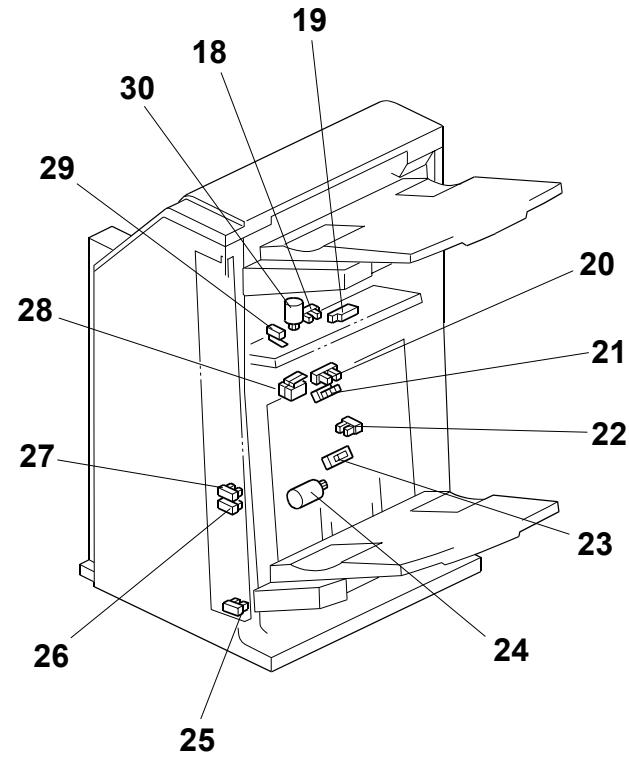
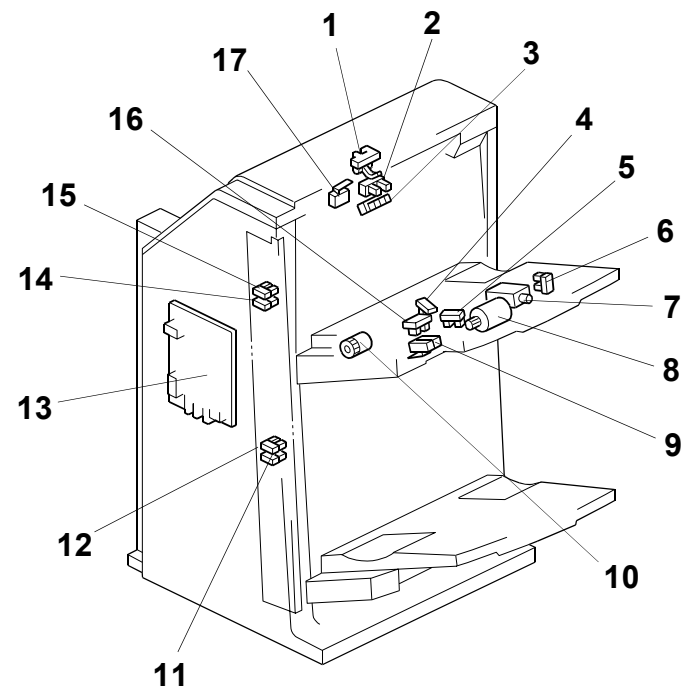
SYMBOL TABLE	
—	DC Line
- - - - -	Pulse Signal
→	Signal Direction
▲	Ready Low
▼	Ready High
[ ]	Voltage

Main (PCB 1)

Staple Unit

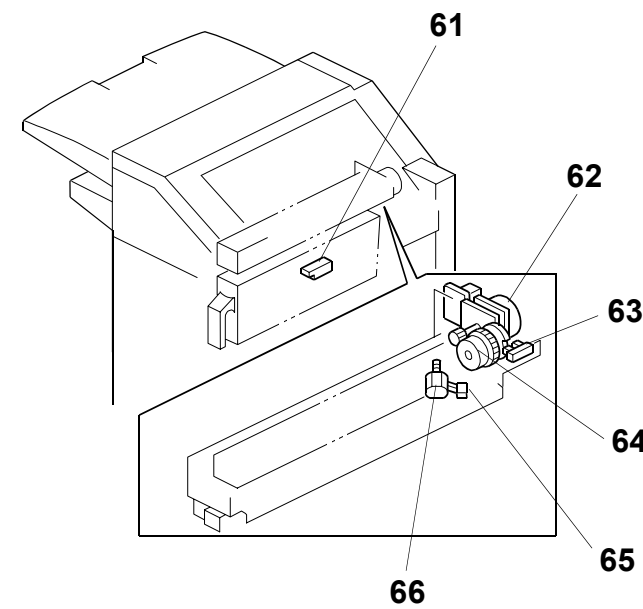
Punch Unit

# 2 TRAY FINISHER (B545) ELECTRICAL COMPONENT LAYOUT



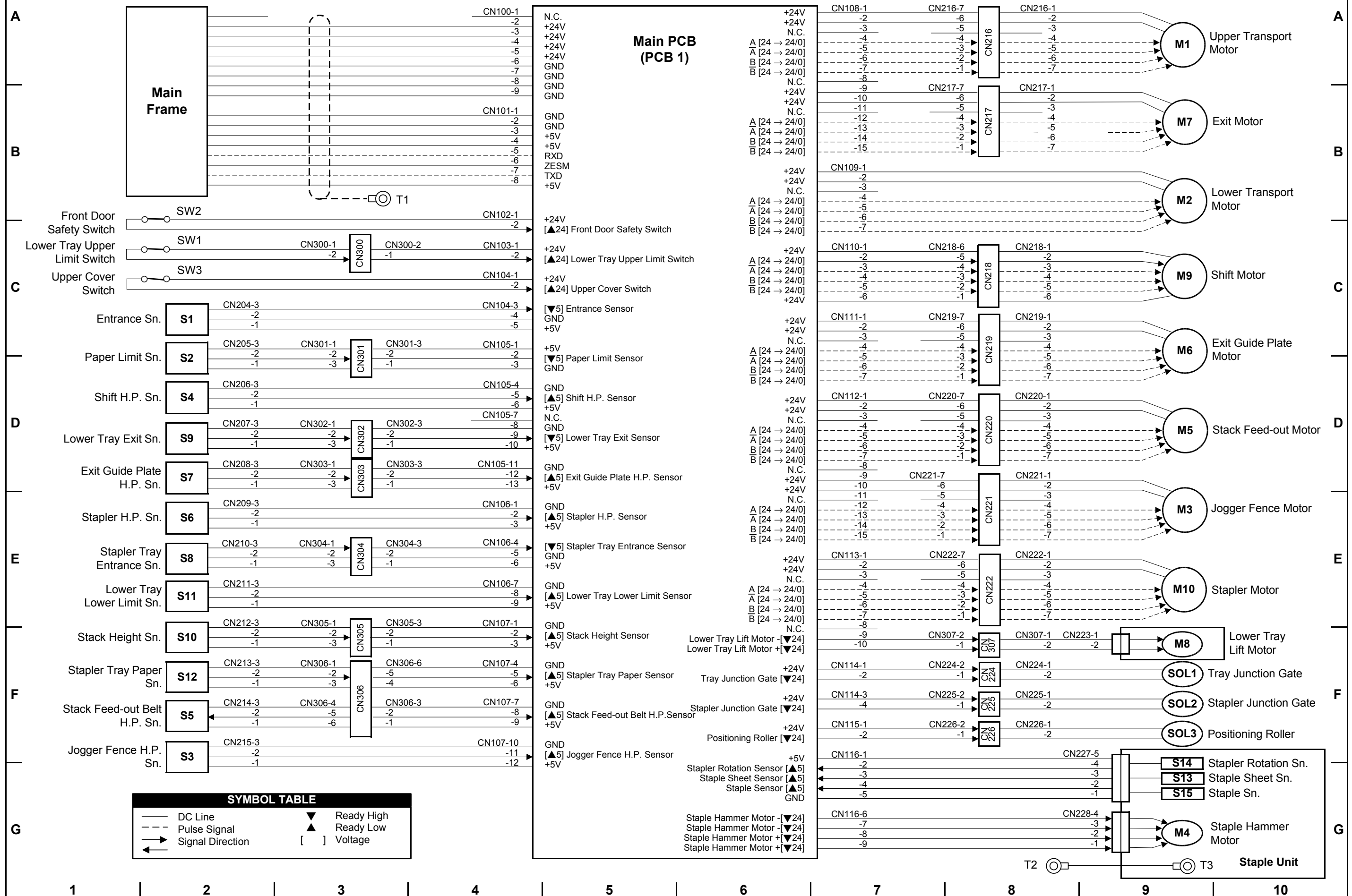
Symbol	Name	Index No.	P to P.
<b>Sensors</b>			
S1	Entrance cover	46	B2
S2	Entrance	47	B2
S3	Exit guide plate open	18	F7
S4	Staple position	59	F5
S5	Jogger HP	48	D2
S6	Tray 2 overflow-2	26	C2
S7	Tray 2 overflow-1	27	D2
S8	Tray 2 lower limit	25	D2
S9	Tray 2 half-turn	22	C7
S10	Tray 2 shunt position	23	D2
S11	Punch hopper	61	F2
S12	Punch HP	63	F2
S13	Lower exit	19	C2
S14	Upper stack height 1	2	B2
S15	Upper stack height 2	3	B2
S16	Tray release	16	D7
S17	Lower stack height 1	20	C2
S18	Lower stack height 2	21	C2
S19	Staple tray entrance	50	B2
S20	Staple tray paper	49	E2
S21	Stapler rotation HP	53	E2
S22	Stack feed-out HP	60	D2
S23	Upper cover	45	C2
S24	Upper exit	1	C2
S25	Tray 1 lower limit	11	D2
S26	Tray shift 1	4	D7
S27	Tray shift 2	5	D7
S28	Shift mode	14	D2
S29	Tray 1 overflow-2	12	C2
S30	Staple mode	6	D7
S31	Tray 1 overflow-1	15	D2
S32	Staple hammer HP	58	F5
S34	Staple end	56	F5
S35	Stapler HP	54	E2

Symbol	Name	Index No.	P to P.
<b>Motors</b>			
M1	Entrance	40	A6
M2	Exit	31	B6
M3	Exit guide plate	30	B6
M4	Jogger	33	C6
M5	Lower transport	37	B6
M6	Tray 2 lift	44	B7
M7	Tray 2 shift	24	C7
M8	Pre-stack	38	D6
M9	Punch	62	E2
M10	Stapler rotation	52	C6
M11	Stapler	34	D6
M12	Stack feed-out	32	B6
M13	Upper transport	39	A6
M14	Tray 1 shift	8	E6
M15	Tray 1 lift	43	B6
M16	Staple hammer	55	F6
M17	Punch hole	66	F2
<b>Solenoids</b>			
SOL1	Tray lock	7	D6
SOL2	Pre-stack junction gate	35	E6
SOL3	Positioning roller	36	E6
SOL4	Stapler junction gate	41	E6
SOL5	Tray junction gate	42	E6
<b>Switches</b>			
SW1	Exit guide safety	29	F7
SW2	Tray 1 safety	9	E7
SW3	Tray 1 upper limit	17	B2
SW4	Tray 2 upper limit	28	C7
SW5	Punch hole	65	F3
SW6	Front door safety	51	B2
<b>Electrical Clutches</b>			
CL1	Back fence lock	10	D7
CL2	Punch	64	E2
<b>PCBs</b>			
PCB1	Main	13	D4
PCB2	Stapler Sensor	57	NA

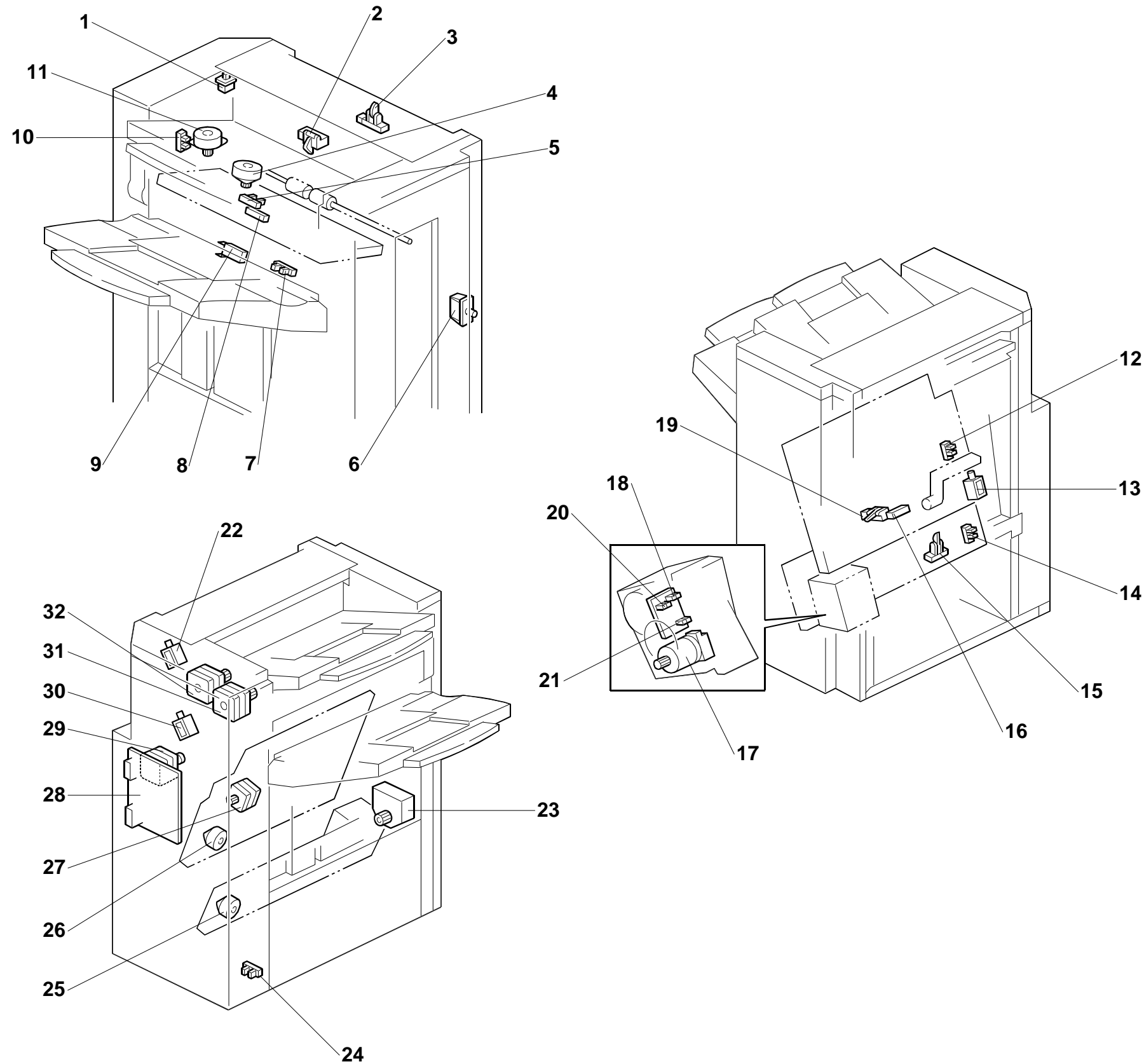


# FINISHER (B408) Point to Point Diagram

Rev. 10/2003



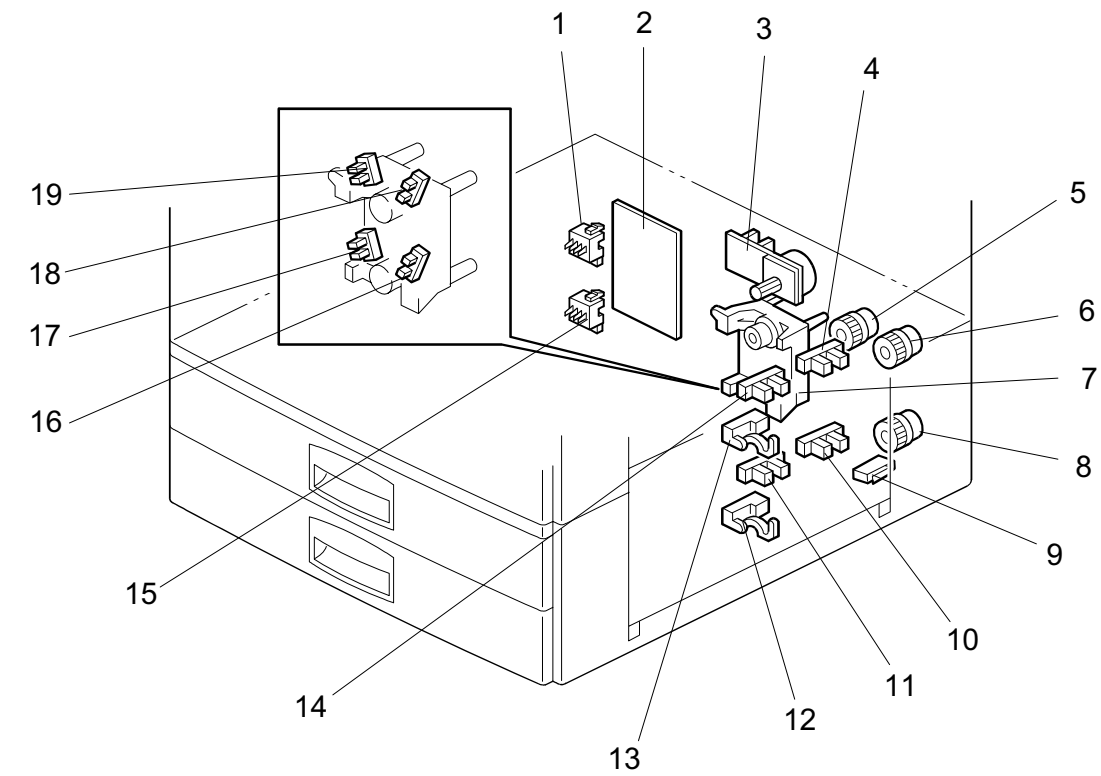
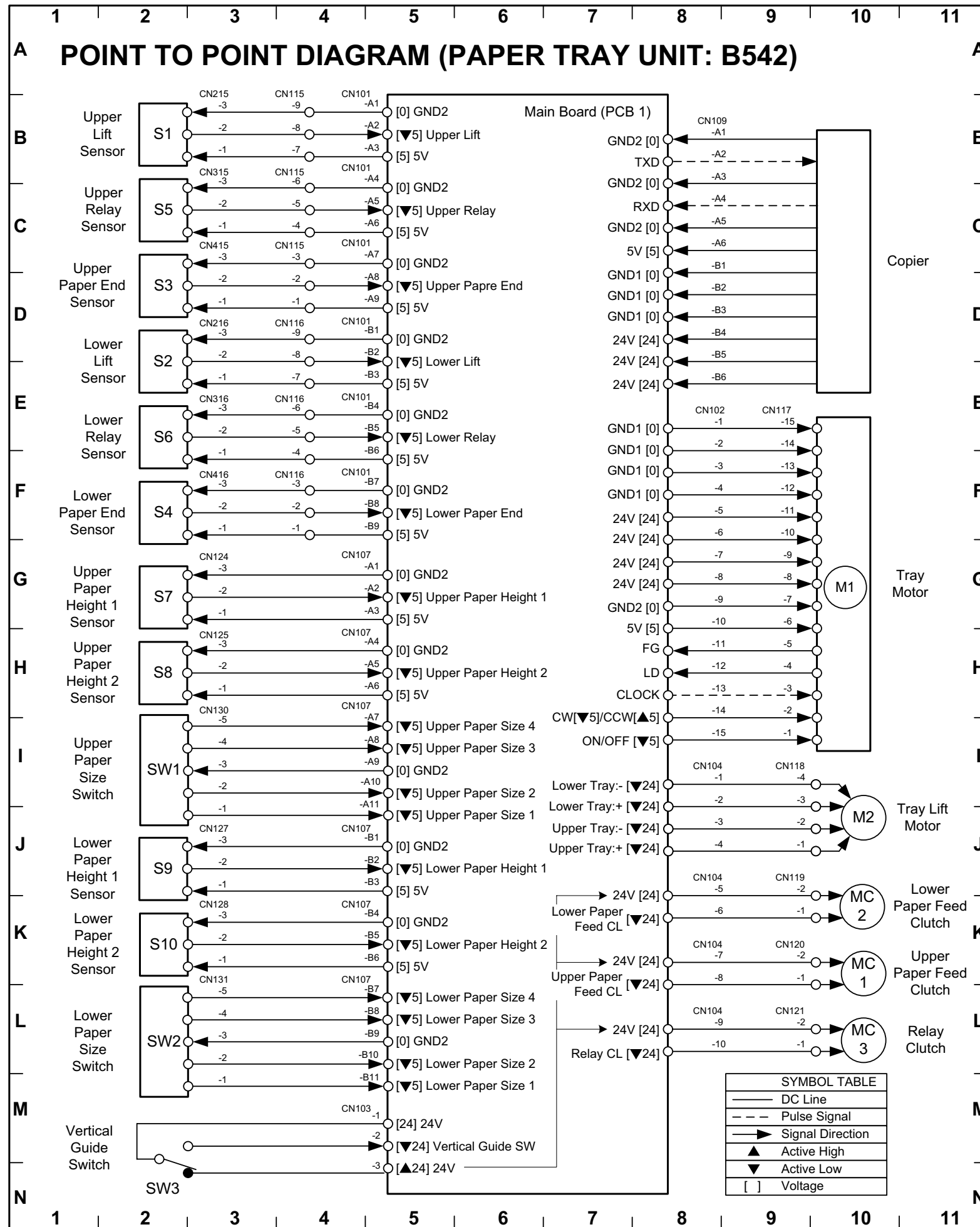
# 1000-SHEET FINISHER (B408) ELECTRICAL COMPONENT LAYOUT



Symbol	Name	Index No.	P to P
<b>Motors</b>			
M1	Upper Transport	32	A9
M2	Lower Transport	29	B9
M3	Jogger Fence	26	E9
M4	Staple Hammer	17	G4
M5	Stack Feed-out	27	D9
M6	Exit Guide Plate	4	C9
M7	Exit	31	B9
M8	Lower Tray Lift	23	F9
M9	Shift	11	C9
M10	Stapler	25	E9
<b>Sensors</b>			
S1	Entrance	3	C2
S2	Paper Limit	2	D2
S3	Jogger Fence HP	12	F2
S4	Shift HP	10	D2
S5	Stack Feed-out Belt HP	19	F2
S6	Stapler HP	14	E2
S7	Exit Guide Plate HP	5	D2
S8	Stapler Tray Entrance	15	E2
S9	Lower Tray Exit	8	D2
S10	Stack Height	7	F2
S11	Lower Tray Lower Limit	24	E2
S12	Stapler Tray Paper	16	F2
S13	Staple Sheet	18	G9
S14	Stapler Rotation HP	20	G9
S15	Staple	21	G9
<b>Solenoids</b>			
SOL1	Tray Junction Gate	22	F9
SOL2	Stapler Junction Gate	30	F9
SOL3	Positioning Roller	13	F9
<b>Switches</b>			
SW1	Lower Tray Upper Limit	9	C2
SW2	Front Door Safety	6	C2
SW3	Upper Cover	1	C2
<b>PCBs</b>			
PCB1	Main	28	A5

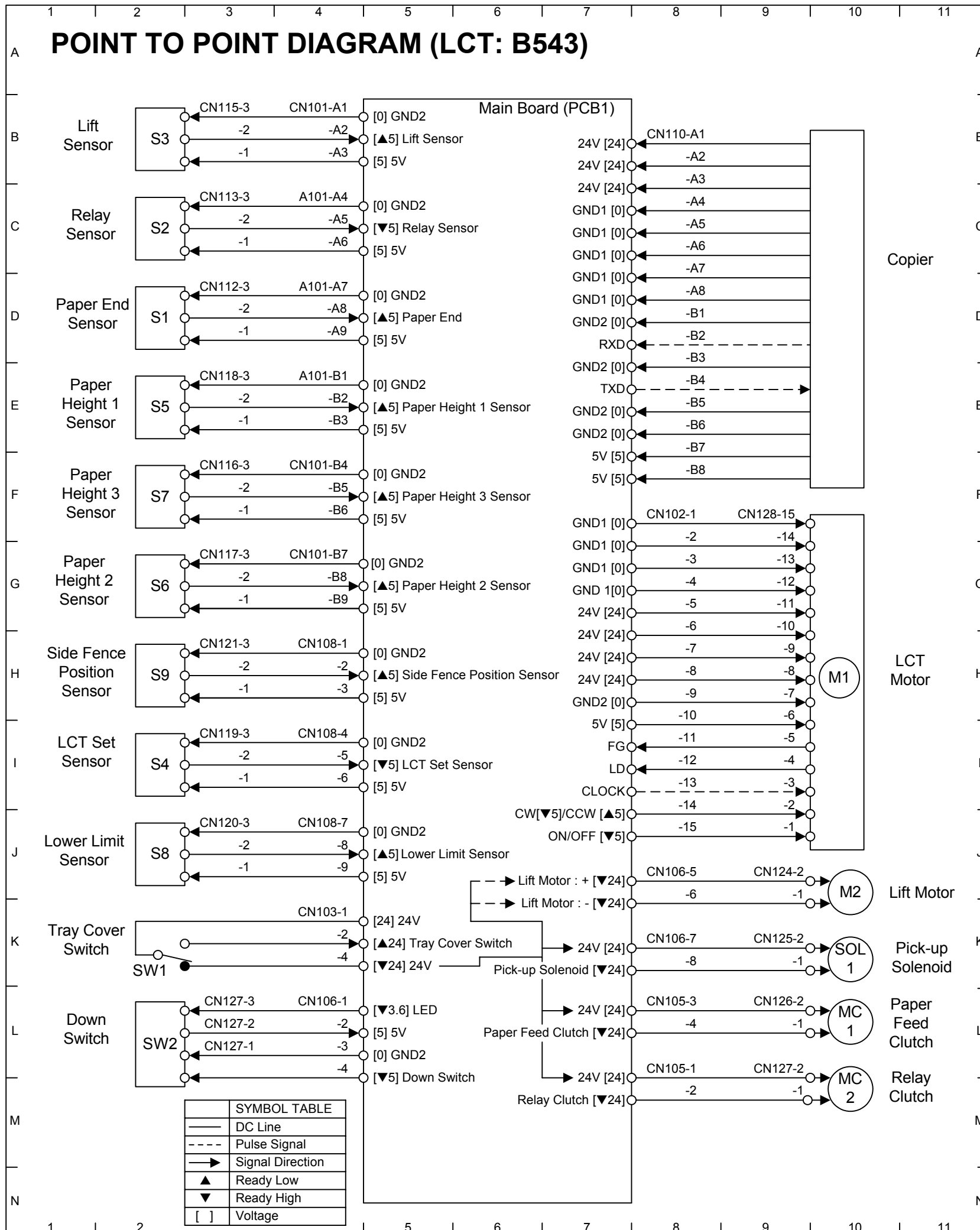
# PAPER TRAY UNIT (B542) ELECTRICAL COMPONENT LAYOUT

Rev. 10/07/2008

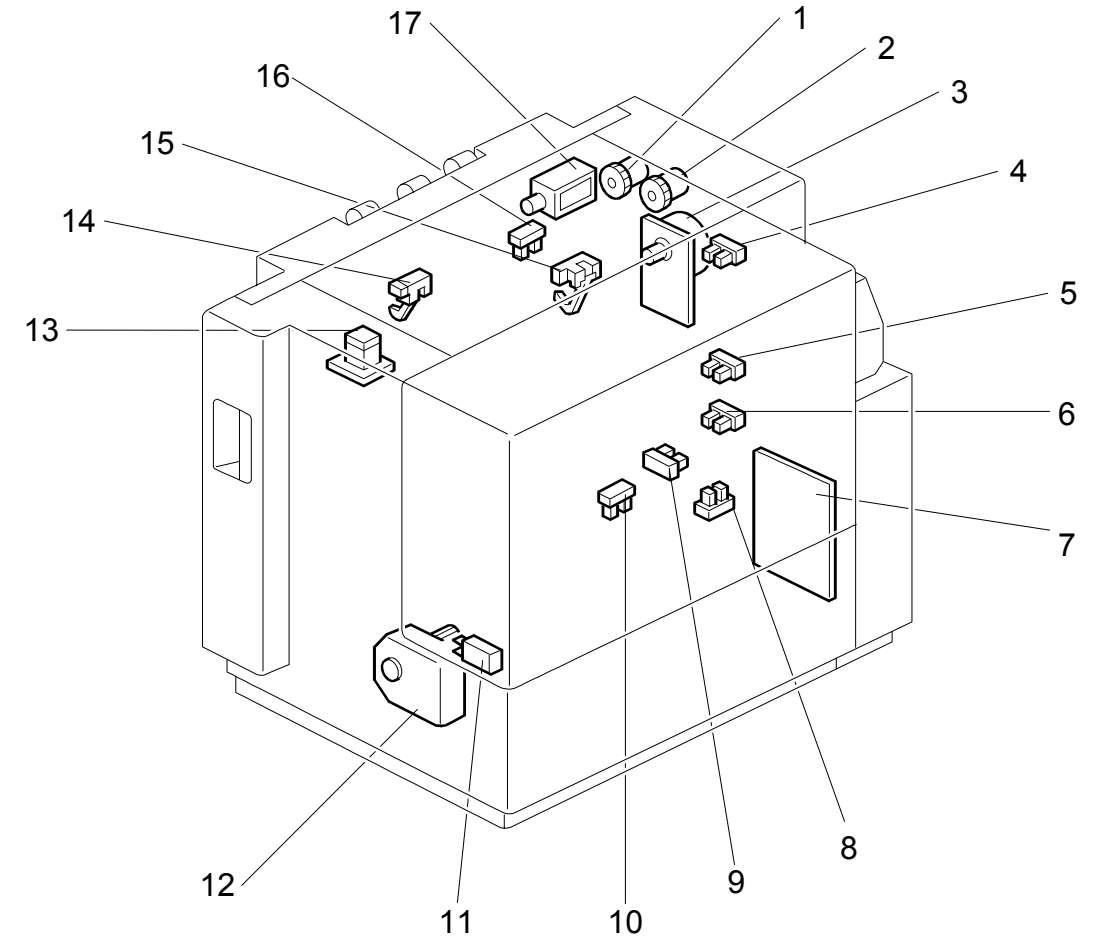


Symbol	Index No.	Description	P to P
<b>Motors</b>			
M1	3	Tray	G10
M2	7	Tray lift	J10
<b>Sensors</b>			
S1	4	Upper Lift	B2
S2	10	Lower Lift	E2
S3	14	Upper Paper End	D2
S4	11	Lower paper End	F2
S5	13	Upper Relay	C2
S6	12	Lower Relay	E2
S7	17	Upper Paper Height 1	G2
S8	16	Upper Paper Height 2	H2
S9	19	Lower Paper Height 1	J2
S10	18	Lower Paper Height 2	K2
<b>Switches</b>			
SW1	1	Upper Paper Size	I2
SW2	15	Lower Paper Size	L2
SW3	9	Vertical Guide	M2
<b>Magnetic Clutches</b>			
MC1	6	Upper Tray	K10
MC2	8	Lower Tray	K10
MC3	5	Relay	L10
<b>PCBs</b>			
PCB1	2	Main	1

# POINT TO POINT DIAGRAM (LCT: B543)

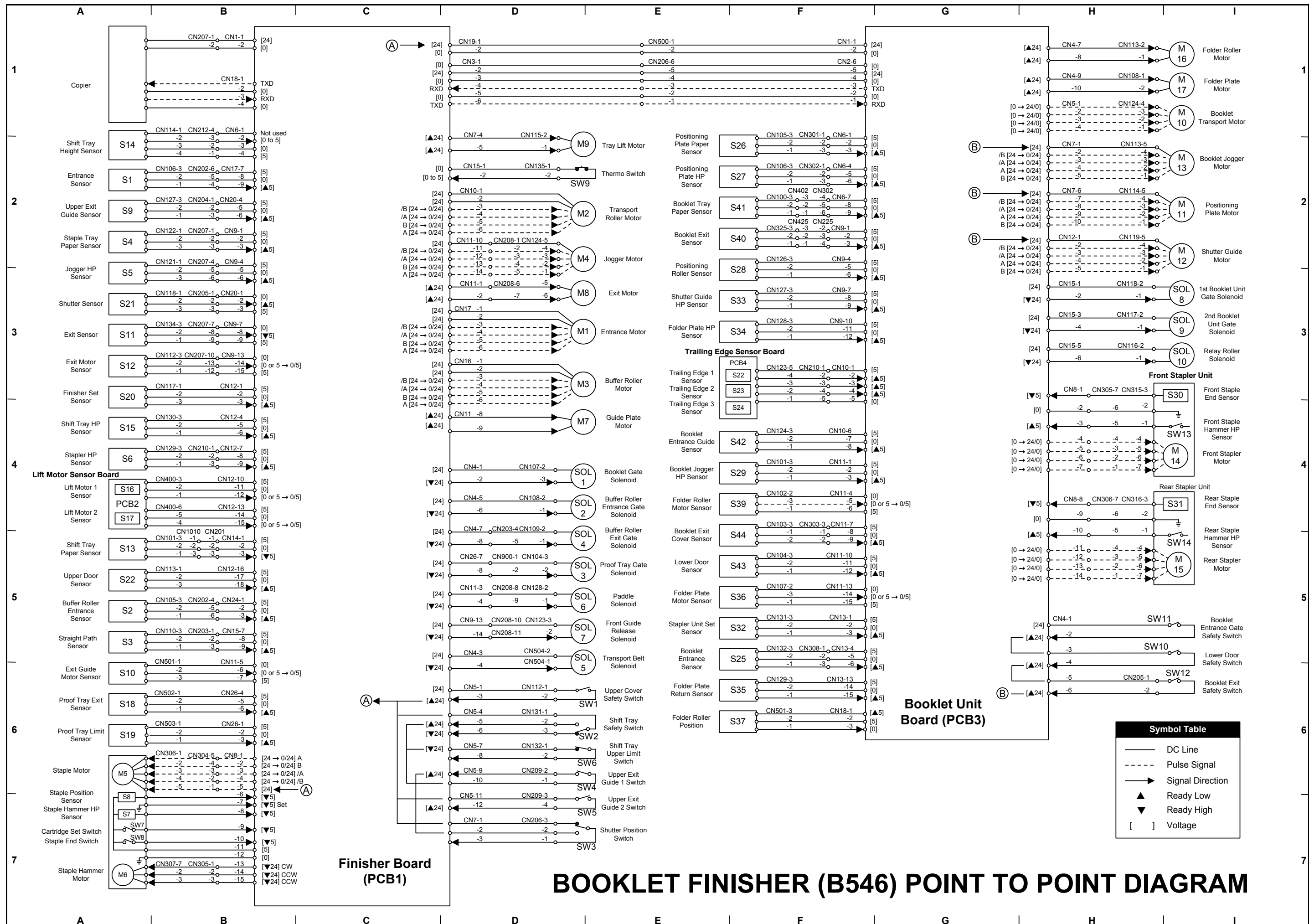


# LCT (B543) ELECTRICAL COMPONENT LAYOUT



Symbol	Index No.	Description	P to P
<b>Motors</b>			
M1	3	LCT	H10
M2	12	Lift	J10
<b>Sensors</b>			
S1	15	Paper End	D2
S2	14	Relay	C2
S3	16	Lift	B2
S4	9	Lower Limit	I2
S5	4	Paper Height 1	E2
S6	5	Paper Height 2	G2
S7	6	Paper Height 3	F2
S8	10	LCT Set	J2
S9	8	Side Fence Position	H2
<b>Switches</b>			
SW1	11	Tray Cover	K2
SW2	13	Down	L2
<b>Solenoid</b>			
SOL1	17	Pick-up	K10
<b>Magnetic Clutches</b>			
MC1	2	Paper Feed	L10
MC2	1	Relay	M10
<b>PCB</b>			
PCB1	7	Main	B6

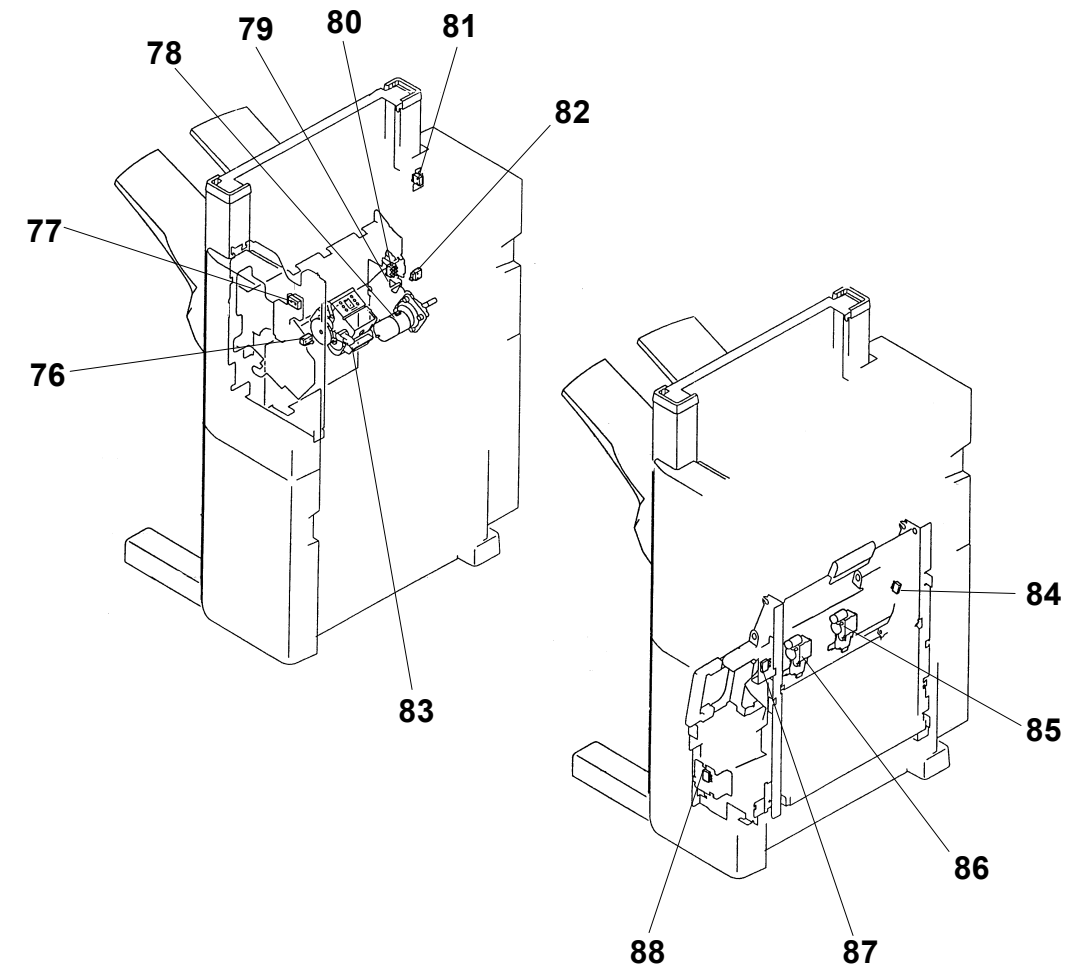
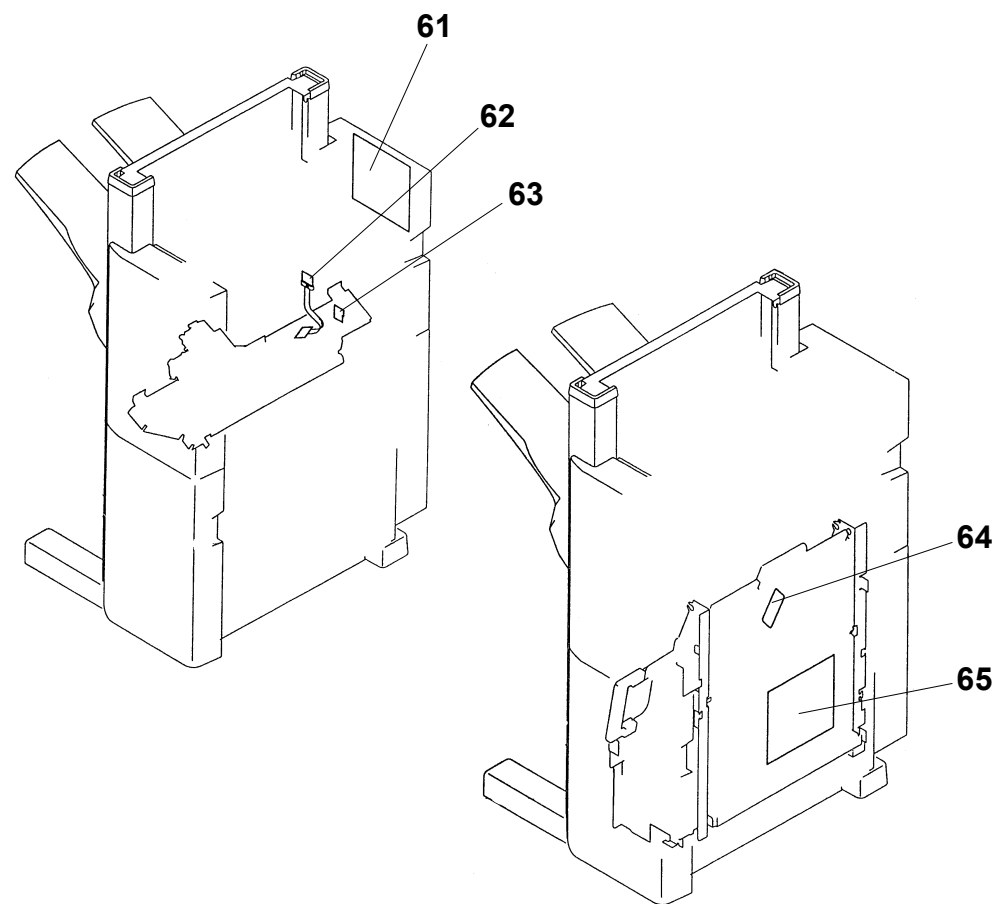
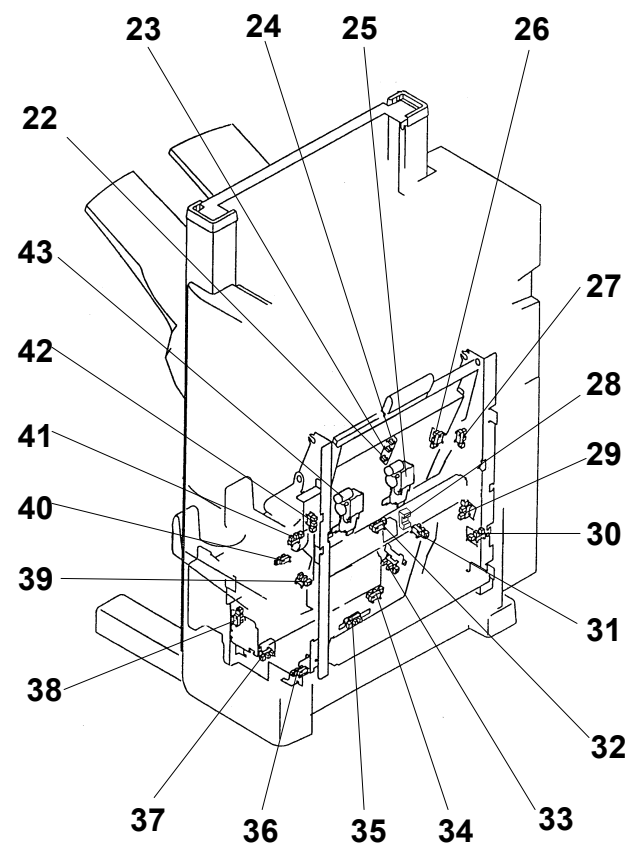
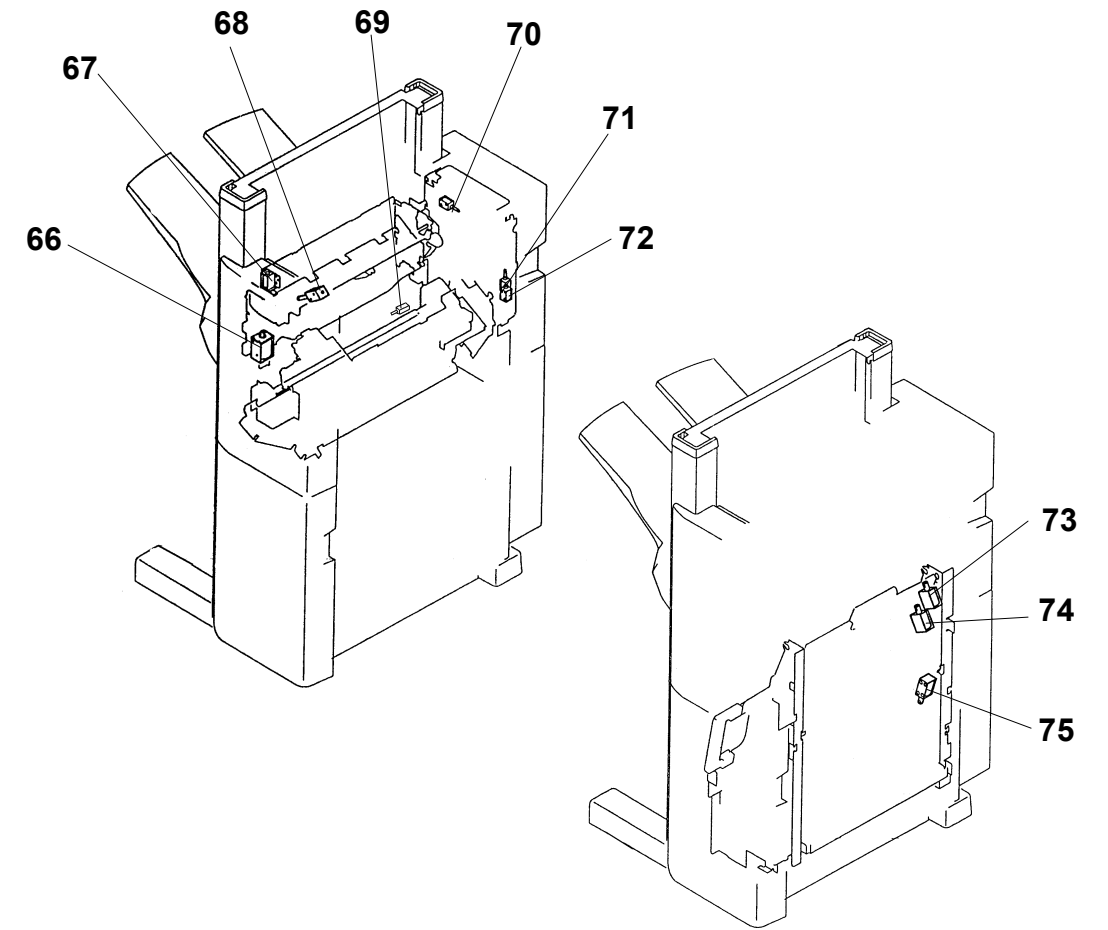
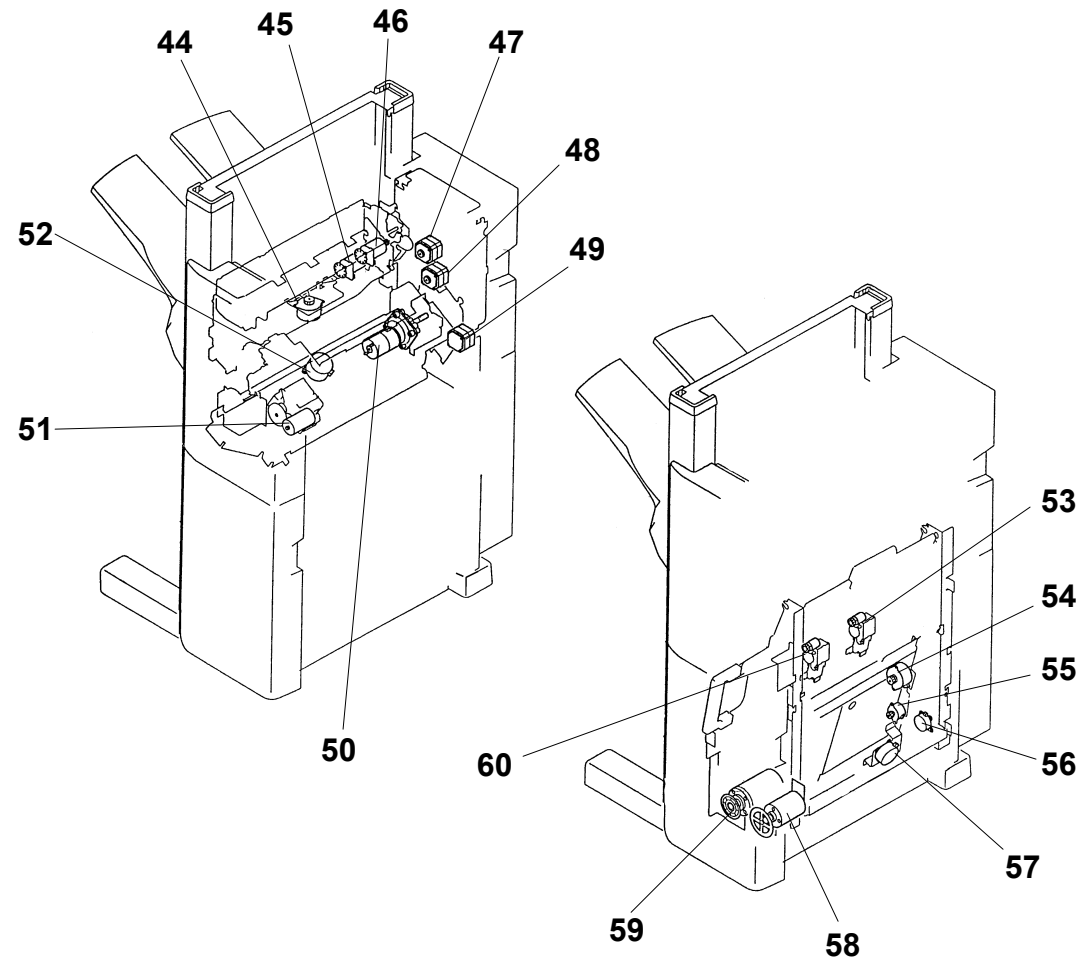
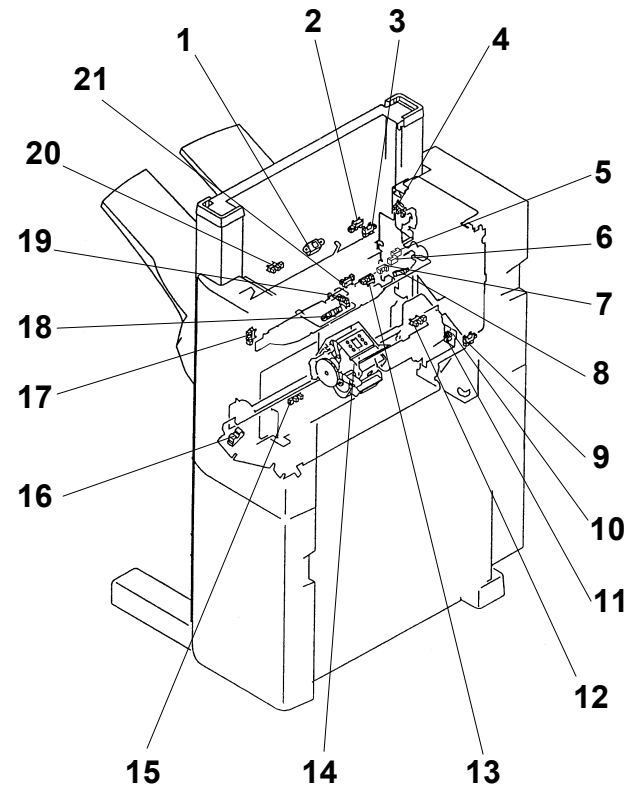




**BOOKLET FINISHER (B546) POINT TO POINT DIAGRAM**

Symbol Table	
—	DC Line
- - - -	Pulse Signal
→	Signal Direction
▲	Ready Low
▼	Ready High
[ ]	Voltage

# ELECTRICAL COMPONENT LAYOUT (B546) (1/2)



# ELECTRICAL COMPONENT LAYOUT (B546) (2/2)

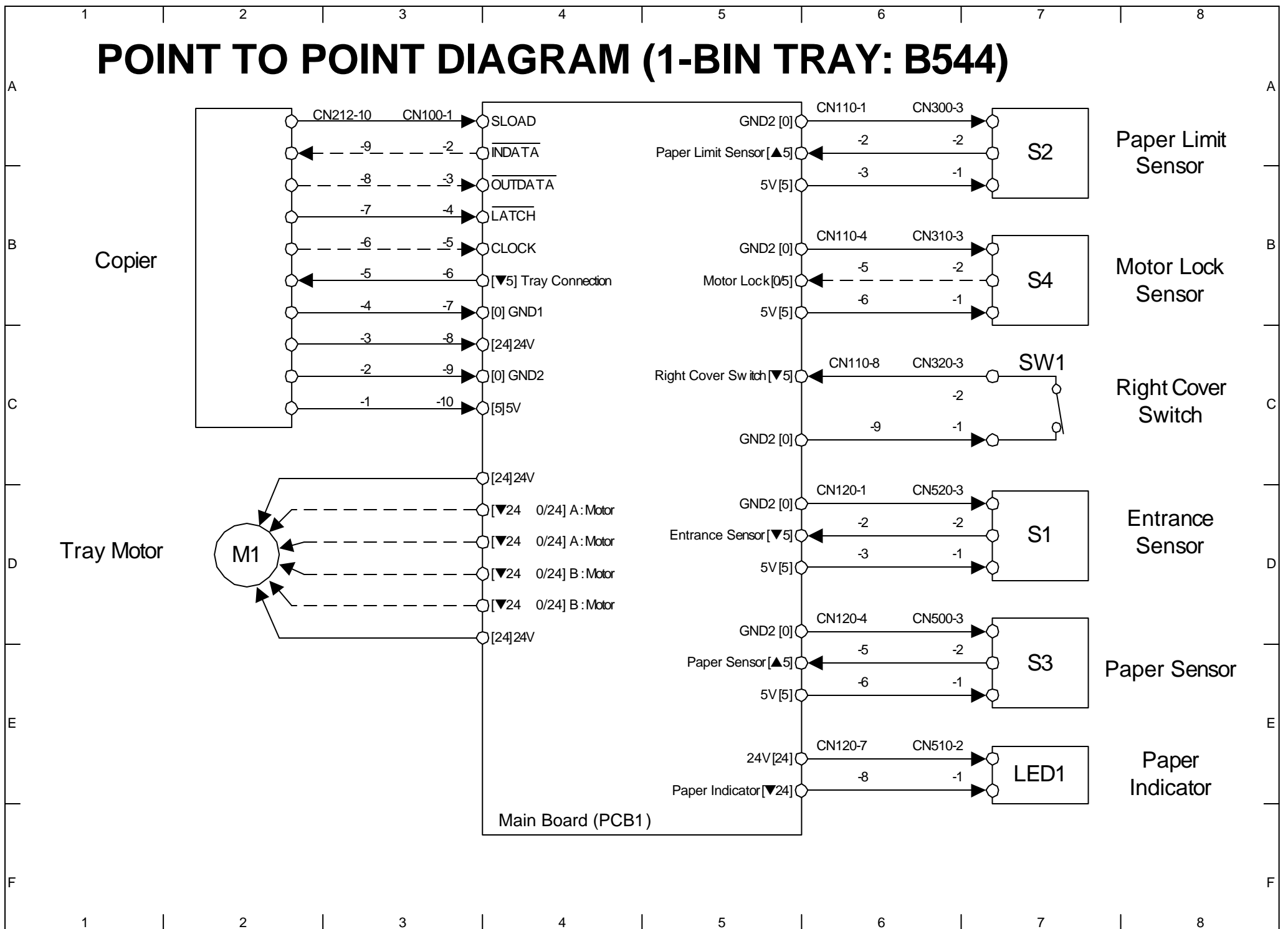
Symbol	Name	Index No.	P to P
<b>Motors</b>			
M1	Entrance	49	E3
M2	Transport Roller	47	E2
M3	Buffer Roller	48	E3
M4	Jogger	44	E2
M5	Stapler	52	A6
M6	Staple Hammer	51	A7
M7	Guide Plate	46	E4
M8	Exit Motor	45	E3
M9	Tray Lift	50	E2
M10	Booklet Transport	56	I1
M11	Positioning Plate	54	I2
M12	Shutter Guide	55	I2
M13	Booklet Jogger	57	I2
M14	Front Stapler	60	I4
M15	Rear Stapler	53	I5
M16	Folder Roller	59	I1
M17	Folder Plate	58	I1

Symbol	Name	Index No.	P to P
<b>Switches</b>			
SW1	Upper Cover Safety	77	E6
SW2	Shift Tray Safety	82	E6
SW3	Shutter Position	76	E7
SW4	Upper Exit Guide 1	80	E6
SW5	Upper Exit Guide 2	79	E7
SW6	Shift Tray Upper Limit	81	E6
SW7	Cartridge Set	83	A7
SW8	Staple End	83	A7
SW9	Thermo	78	E2
SW10	Lower Door Safety	87	I5
SW11	Booklet Entrance Guide Safety	84	I5
SW12	Booklet Exit Safety	88	I6
SW13	Front Staple Hammer HP	86	I4
SW14	Rear Staple Hammer HP	85	I5

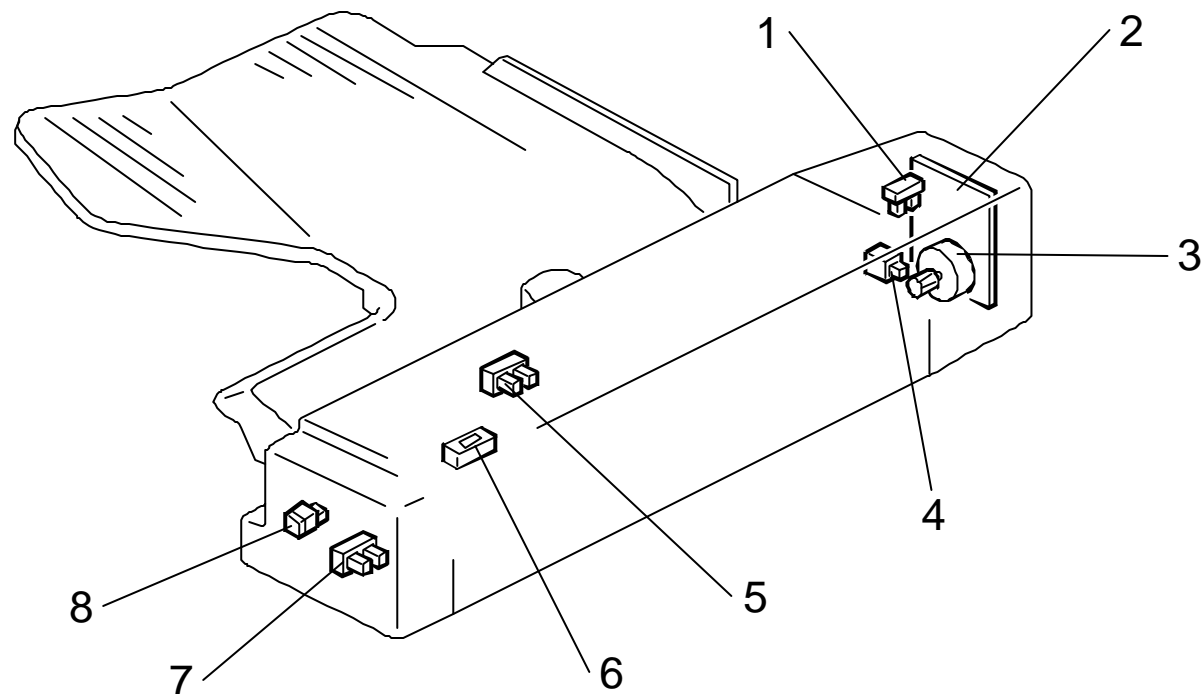
Symbol	Name	Index No.	P to P
<b>Sensors</b>			
S1	Entrance	3	A2
S2	Buffer Roller Entrance	2	A5
S3	Straight Path	21	A5
S4	Staple Tray Paper	8	A2
S5	Jogger HP	19	A3
S6	Stapler Unit HP	16	A4
S7	Staple Hammer HP	14	A7
S8	Staple Position	14	A7
S9	Upper Exit Guide	4	A2
S10	Exit Guide Motor	7	A6
S11	Exit	18	A3
S12	Exit Motor	13	A3
S13	Shift Tray Paper	20	A5
S14	Shift Tray height	1	A2
S15	Shift Tray HP	12	A4
S16	Lift Motor 1	11	A4
S17	Lift Motor 2	10	A4
S18	Proof Tray Exit	5	A6
S19	Proof Tray Limit	6	A6
S20	Finisher Set	20	A6
S21	Shutter	15	A3
S22	Trailing Edge 1	24	F3
S23	Trailing Edge 2	23	F3
S24	Trailing Edge 3	22	F4
S25	Booklet Entrance	32	F5
S26	Positioning Plate Paper	34	F2
S27	Positioning Plate HP	35	F2
S28	Positioning Roller	31	F3
S29	Booklet Jogger HP	39	F4
S30	Front Staple End	43	I3
S31	Rear Staple End	25	I4
S32	Stapler Unit Set	26	F5
S33	Shutter Guide HP	33	F3
S34	Folder Plate HP	29	F3
S35	Folder Plate Return	30	F6
S36	Folder Plate Motor	36	F5
S37	Folder Roller Position	28	F6

Symbol	Name	Index No.	P to P
<b>Sensors</b>			
S39	Folder Roller Motor	37	F4
S40	Booklet Exit	41	F2
S41	Booklet Tray Paper	40	F2
S42	Booklet Entrance Guide	27	F4
S43	Lower Door	42	F5
S44	Booklet Exit Cover	38	F5
S45	Upper Door	16	F6

Symbol	Name	Index No.	P to P
<b>Solenoids</b>			
SOL1	Booklet Gate	72	E4
SOL2	Buffer Roller Entrance Gate	71	E4
SOL3	Proof Tray Gate	70	E5
SOL4	Buffer Roller Exit Gate	68	E4
SOL5	Transport Belt	69	E5
SOL6	Paddle	67	E5
SOL7	Front Guide Release	66	E5
SOL8	1st Booklet Unit Gate	73	I3
SOL3	2nd Booklet Unit Gate	74	I3
SOL4	Relay Roller	75	I3
<b>PCBs</b>			
PCB1	Finisher	61	C7
PCB2	Lift Motor Sensor	63	A4
PCB3	Booklet Unit	65	G6
PCB4	Trailing Edge Sensor	64	F3
<b>Others</b>			
HR1	Stapler Interface	62	-



## 1-BIN TRAY (B544) ELECTRICAL COMPONENT LAYOUT

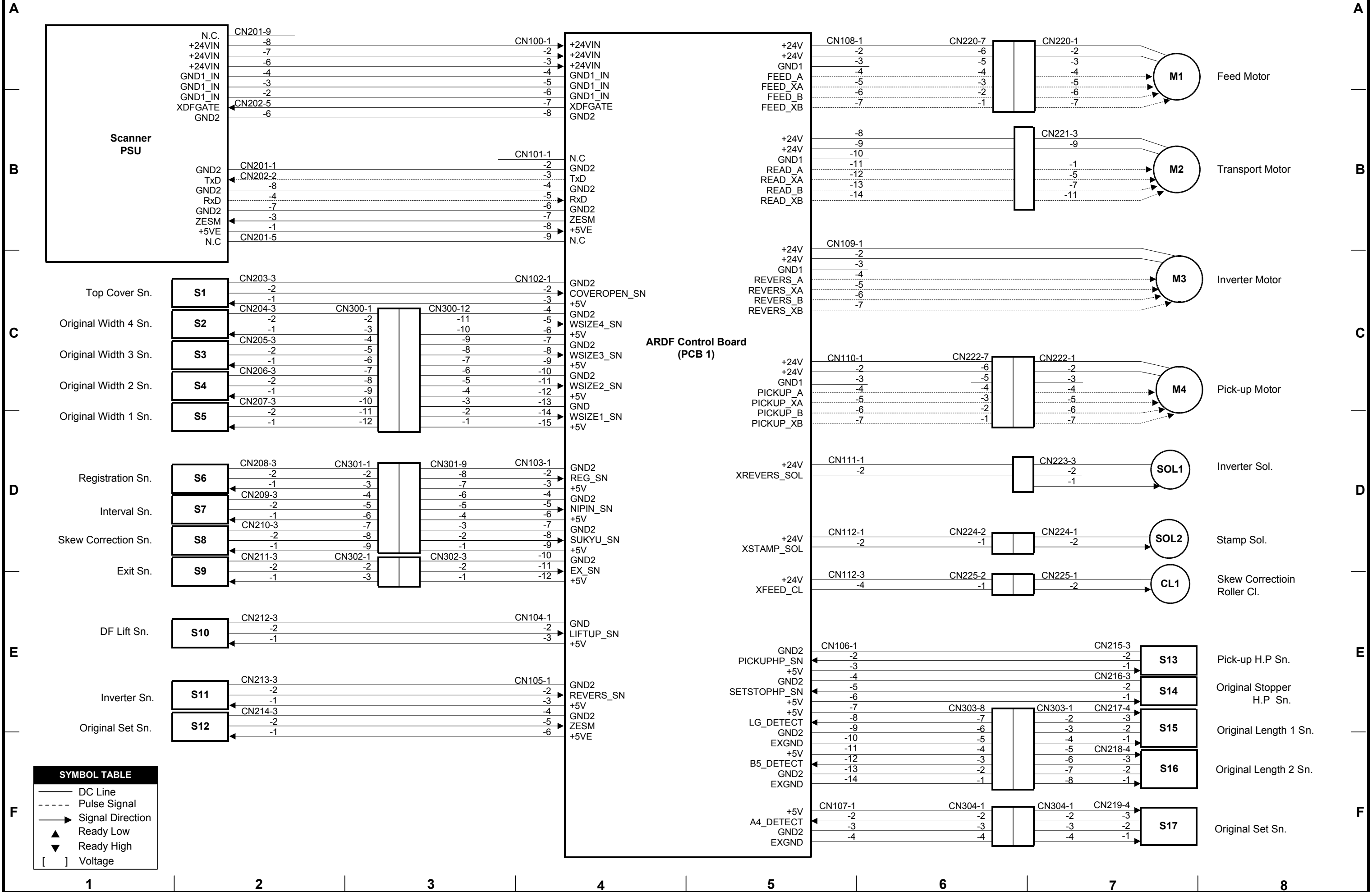


Symbol	Index No.	Description	P to P
<b>Motor</b>			
M1	3	Tray	D2
<b>Sensors</b>			
S1	7	Entrance	D7
S2	5	Paper Limit	A7
S3	6	Paper	E7
S4	1	Motor Lock	B7

Symbol	Index No.	Description	P to P
<b>Switch</b>			
SW1	4	Right Cover	C7
<b>PCB</b>			
PCB1	2	Main	A4
<b>LED</b>			
LED1	8	Paper Indicator	E7

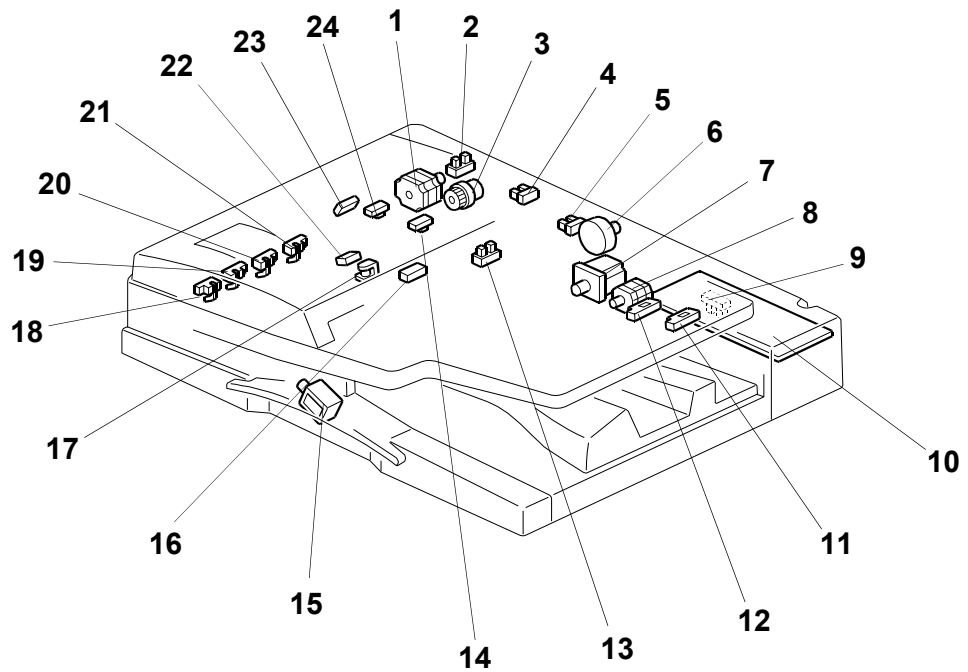
# ARDF (B714) POINT TO POINT DIAGRAM

Rev. 06/2005



SYMBOL TABLE	
—	DC Line
- - -	Pulse Signal
→	Signal Direction
▲	Ready Low
▼	Ready High
[ ]	Voltage

# ARDF (B714) ELECTRICAL COMPONENT LAYOUT



## ELECTRICAL COMPONENT DESCRIPTION

Symbol	Name	Index No.	P to P
<b>Motors</b>			
M1	Pick-up	6	C7
M2	Feed	1	A7
M3	Transport	7	B7
M4	Inverter	8	C7
<b>Sensors</b>			
S1	Top cover	2	C2
S2	Pick-up HP	4	E2
S3	Original stopper HP	5	E2
S4	Lift	9	E2
S5	Original length 2	11	F2
S6	Original length 1	12	F2
S7	Original set	13	E7
S8	Skew correction	14	D2
S9	Inverter	16	E7
S10	Original Width 1	21	D2
S11	Original Width 2	20	C2
S12	Original Width 3	19	C2
S13	Original Width 4	18	C2
S14	Exit	22	E2
S15	Registration	23	D2
S16	Interval	24	D2
<b>Solenoid</b>			
SOL1	Inverter	15	D7
SOL2	Stamp	17	D7
<b>Electrical Clutch</b>			
CL1	Skew correction roller	3	E7
<b>PCB</b>			
PCB1	ARDF control board	10	F5