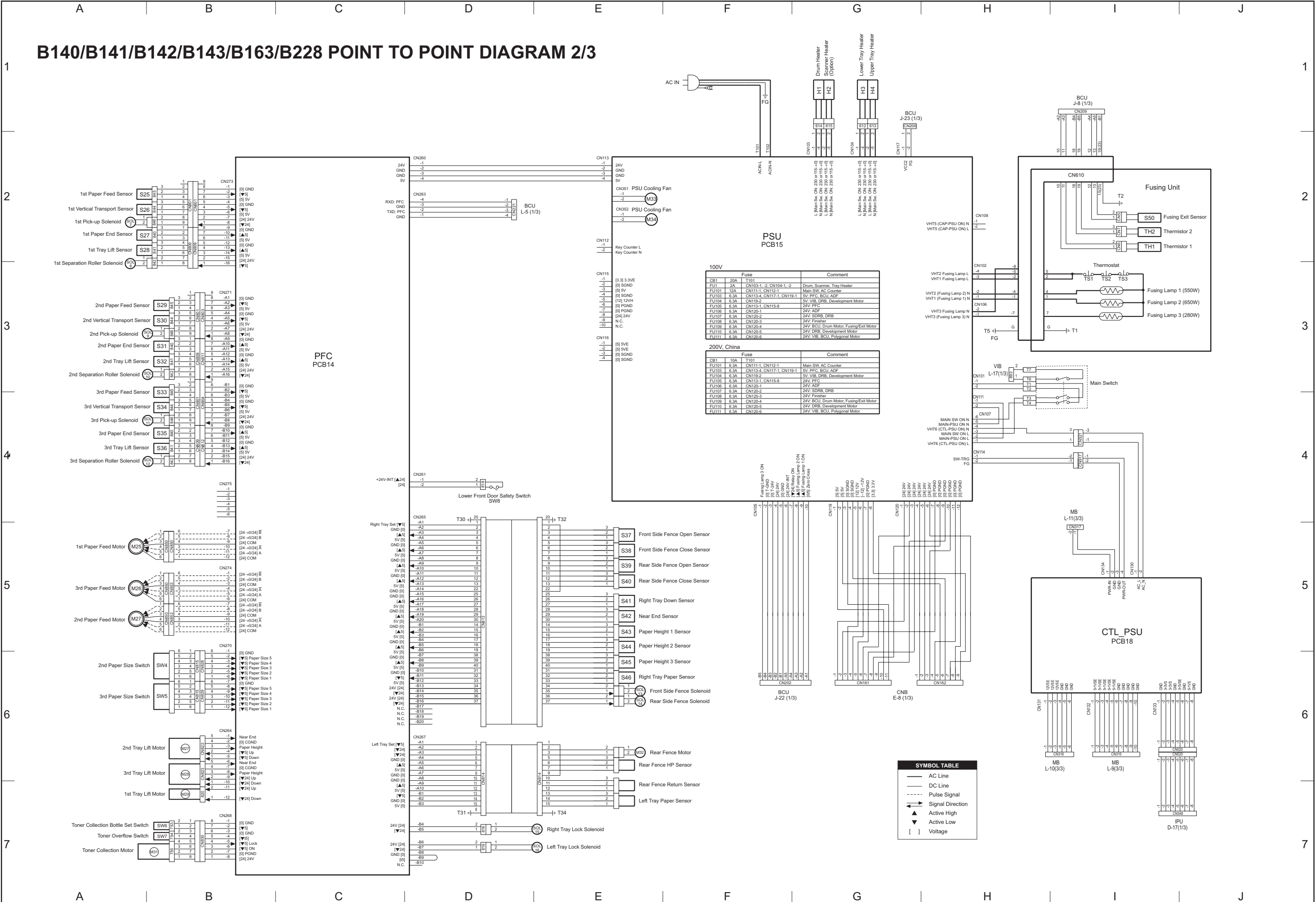


B140/B141/B142/B143/B163/B228 POINT TO POINT DIAGRAM 2/3



100V Fuse

Fuse	Comment
CB1 20A T101	Main SW AC Counter
FU1 2A CN103-1, 2, CN104-1, 2	Drum, Scanner, Tray Heater
FU101 12A CN111-1, CN112-1	Main SW AC Counter
FU103 6.3A CN113-4, CN117-1, CN119-1	5V PFC, BCU, ADF
FU104 6.3A CN119-2	5V VIB, DRB, Development Motor
FU105 6.3A CN113-1, CN115-8	24V PFC
FU106 6.3A CN120-1	24V ADF
FU107 6.3A CN120-2	24V SDRB, DRB
FU108 6.3A CN120-3	24V Finisher
FU109 6.3A CN120-4	24V BCU, Drum Motor, Fusing/Exit Motor
FU110 6.3A CN120-5	24V DRB, Development Motor
FU111 6.3A CN120-6	24V VIB, BCU, Polygonal Motor

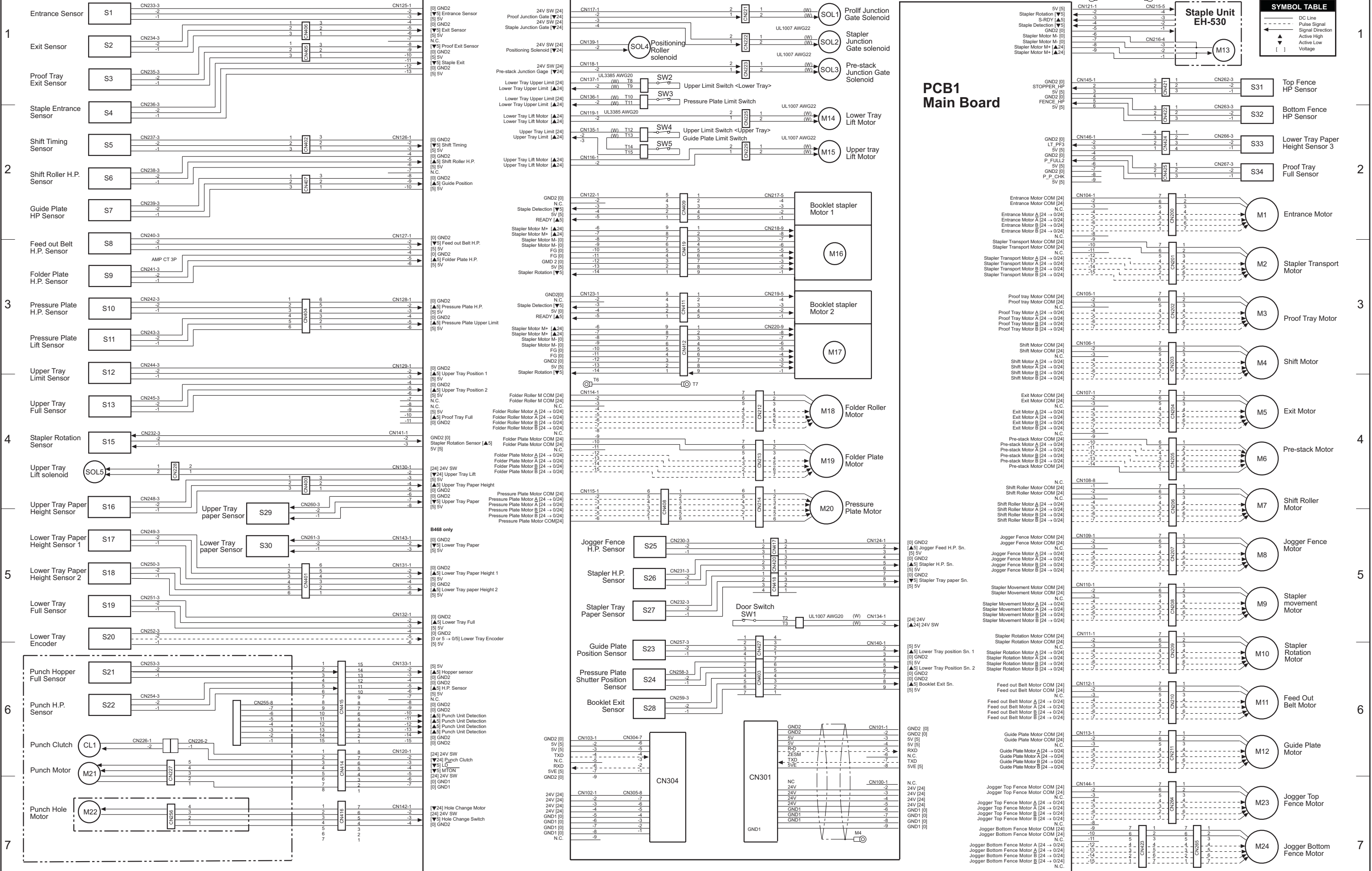
200V, China Fuse

Fuse	Comment
CB1 10A T101	Main SW AC Counter
FU103 6.3A CN113-4, CN117-1, CN119-1	5V PFC, BCU, ADF
FU104 6.3A CN119-2	5V VIB, DRB, Development Motor
FU105 6.3A CN113-1, CN115-8	24V PFC
FU106 6.3A CN120-1	24V ADF
FU107 6.3A CN120-2	24V SDRB, DRB
FU108 6.3A CN120-3	24V Finisher
FU109 6.3A CN120-4	24V BCU, Drum Motor, Fusing/Exit Motor
FU110 6.3A CN120-5	24V DRB, Development Motor
FU111 6.3A CN120-6	24V VIB, BCU, Polygonal Motor

SYMBOL TABLE

- AC Line
- DC Line
- - - Pulse Signal
- Signal Direction
- ▲ Active High
- ▼ Active Low
- [] Voltage

3000-SHEET BOOKLET FINISHER (B674) POINT TO POINT DIAGRAM



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

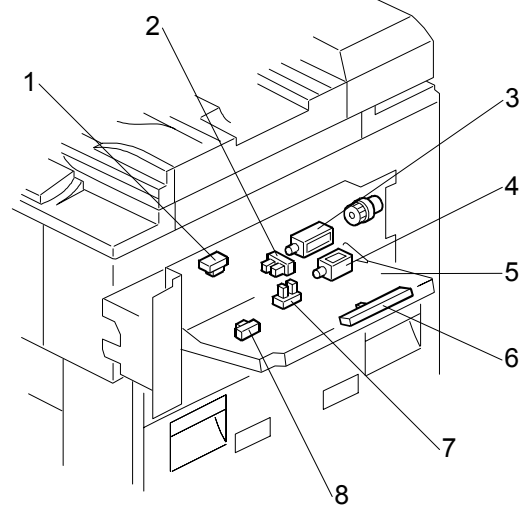
PCB1 Main Board

Staple Unit EH-530

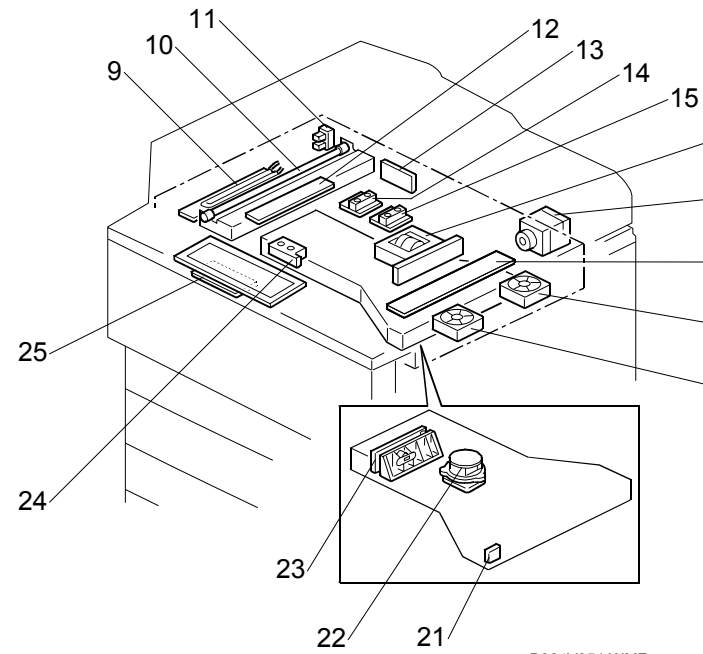
Motor labels: M1 Entrance Motor, M2 Stapler Transport Motor, M3 Proof Tray Motor, M4 Shift Motor, M5 Exit Motor, M6 Pre-stack Motor, M7 Shift Roller Motor, M8 Jogger Fence Motor, M9 Stapler movement Motor, M10 Stapler Rotation Motor, M11 Feed Out Belt Motor, M12 Guide Plate Motor, M13 Staple Unit Motor, M14 Lower Tray Lift Motor, M15 Upper tray Lift Motor, M16 Booklet stapler Motor 1, M17 Booklet stapler Motor 2, M18 Folder Roller Motor, M19 Folder Plate Motor, M20 Pressure Plate Motor, M21 Punch Motor, M22 Punch Hole Motor, M23 Jogger Top Fence Motor, M24 Jogger Bottom Fence Motor.

B140/B141/B142/B143/B163/B228 ELECTRICAL COMPONENT LAYOUT (1/2)

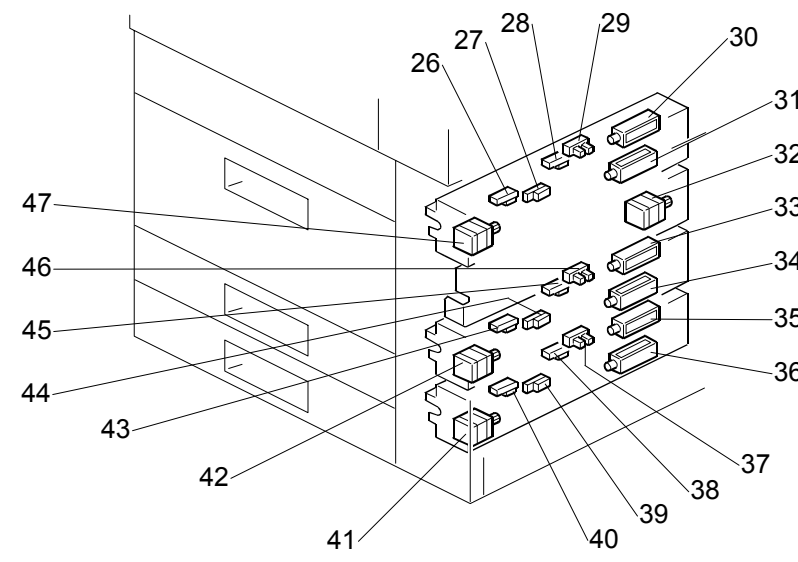
Main Machine



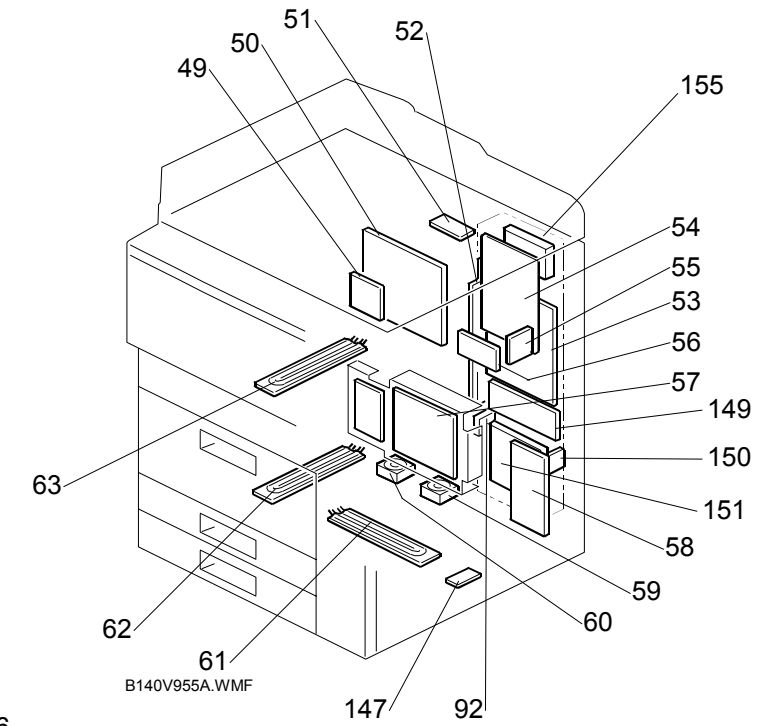
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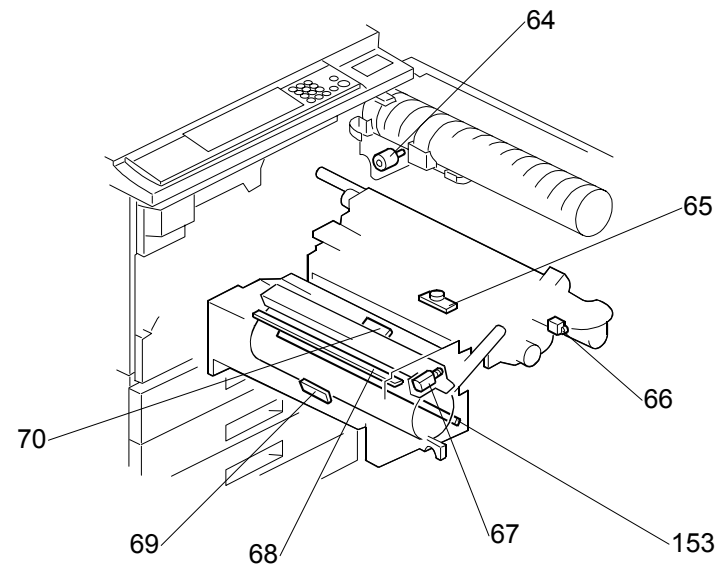
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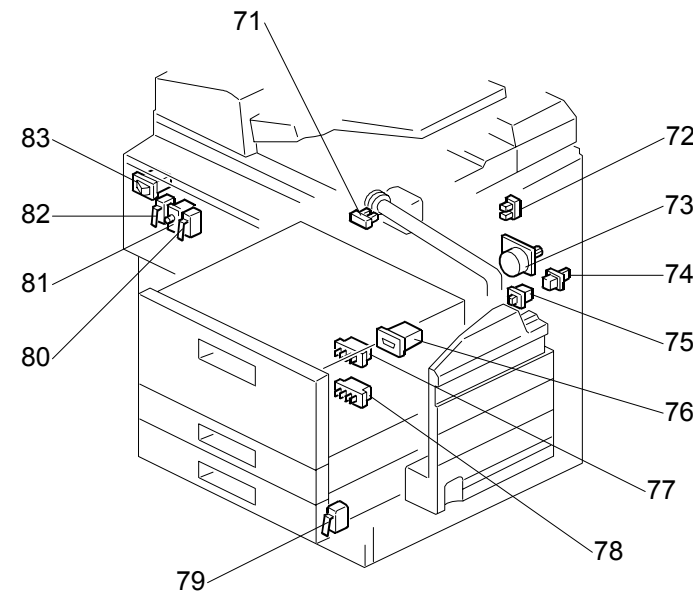
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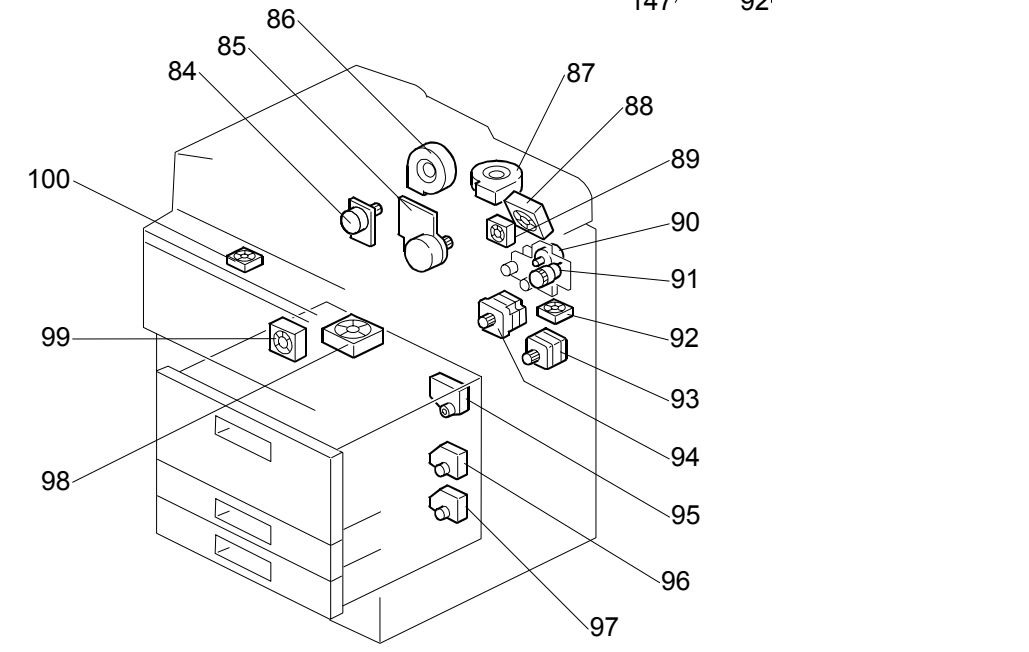
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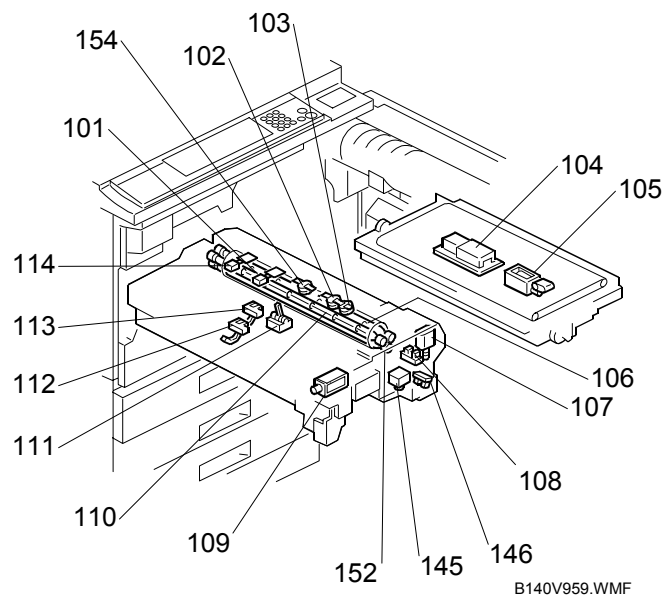
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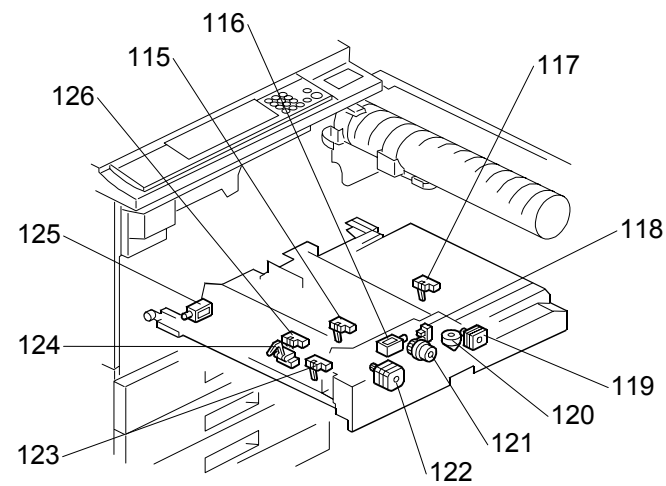
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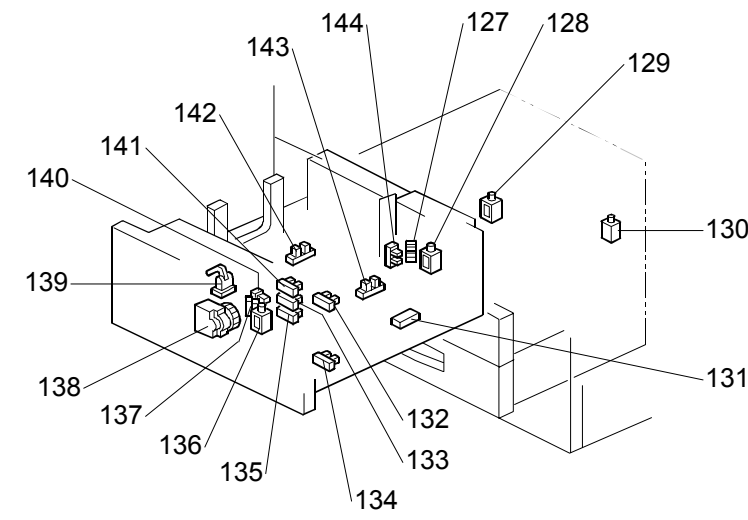
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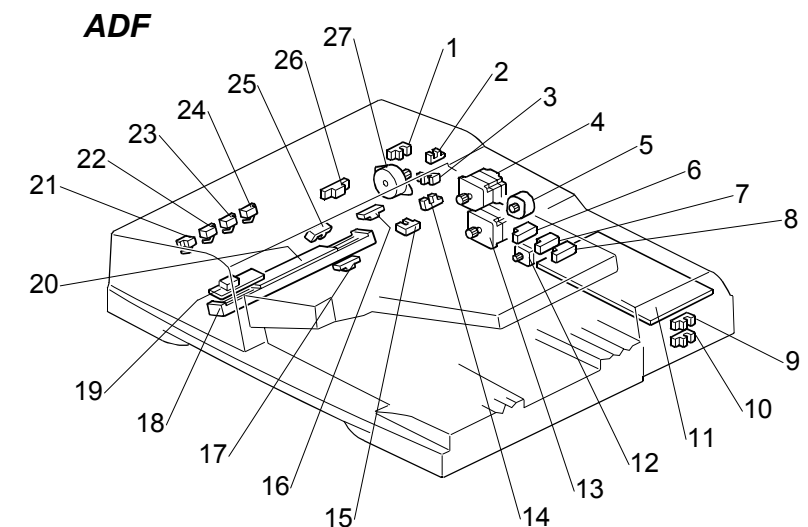
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B064V910.WMF



B064V958.WMF



B064V996.WMF

B140/B141/B142/B143/B163/B228 ELECTRICAL COMPONENT LAYOUT (2/2)

Main Machine

Symbol	Index No.	Description	P to P
Motors			
M1	92	Bottom Side Cooling Fan	E6 (3/3)
M2	89	CPU Cooling Fan	E3 (3/3)
M3	22	Polygonal Mirror	J1 (1/3)
M4	100	Toner Cooling Fan	G4 (1/3)
M5	85	Drum	A2 (1/3)
M6	84	Fusing/Exit	B2 (1/3)
M7	90	Development	B2 (1/3)
M8	122	Duplex Inverter	A7 (1/3)
M9	120	Duplex Transport	A7 (1/3)
M10	94	Registration	A6 (1/3)
M11	93	By-pass Feed	A6 (1/3)
M12	17	Scanner	E4 (1/3)
M13	86	Exhaust Fan	C6 (1/3)
M14	87	Charge Power Pack Cooling Fan	C6 (1/3)
M15	19	Development Unit Cooling Fan 1	C6 (1/3)
M16	20	Development Unit Cooling Fan 2	C6 (1/3)
M17	88	Drum Cooling Fan	D6 (1/3)
M18	107	Web	E6 (1/3)
M19	67	Charge Corona Wire Cleaner	E6
M20	99	PCU Cooling Fan	E6 (1/3)
M21	121	Jogger	G6 (1/3)
M22	64	Toner Supply	J6 (1/3)
M23	98	Duplex Cooling Fan	J6 (1/3)
M24	32	Lower Relay	A6 (1/3)
M25	47	1st Paper Feed	C5 (2/3)
M26	41	3rd Paper Feed	C5 (2/3)
M27	42	2nd Paper Feed	C5 (2/3)
M28	96	2nd Tray Lift	B6 (2/3)
M29	97	3rd Tray Lift	B6 (2/3)
M30	95	1st Tray Lift	B7 (2/3)
M31	73	Toner Collection	B7 (2/3)
M32	138	Rear Fence	E6 (2/3)
M33	59	PSU Cooling Fan 1	E2 (2/3)
M34	60	PSU Cooling Fan 2	E2 (2/3)
M35	145	Fusing Pressure Release Motor	D6 (1/3)
Sensors			
S1	24	Original Width	D4 (1/3)
S2	14	Original Length 1	D4 (1/3)
S3	15	Original Length 2	E4 (1/3)
S4	11	Scanner HP	E4 (1/3)
S5	72	Toner Collection Motor	D6 (1/3)
S6	108	Web End	E6 (1/3)
S7	113	Exit Unit Entrance	E6 (1/3)
S8	112	Paper Exit	E6 (1/3)
S9	69	Image Density (ID)	E6 (1/3)
S10	70	Drum Potential	F6 (1/3)
S11	124	Duplex Entrance	F6 (1/3)
S12	126	Duplex Inverter	F6 (1/3)
S13	123	Duplex Transport 1	F6 (1/3)
S14	118	Duplex Jogger HP	G6 (1/3)
S15	115	Duplex Transport 2	G6 (1/3)
S16	117	Duplex Transport 3	G6 (1/3)
S17	71	Toner Collection Coil	G6 (1/3)

Symbol	Index No.	Description	P to P
S18	66	Toner End	H6 (1/3)
S19	65	Toner Density (TD)	H6 (1/3)
S20	1	Registration	I6 (1/3)
S21	7	By-pass Paper End	I6 (1/3)
S22	8	Relay	I6 (1/3)
S23	6	By-pass Paper Size	J6 (1/3)
S24	2	Guide Plate Position	J6 (1/3)
S25	26	1st Paper Feed	B2 (2/3)
S26	27	1st Vertical Transport	B2 (2/3)
S27	28	1st Paper End	B2 (2/3)
S28	29	1st Tray Lift	B2 (2/3)
S29	43	2nd Paper Feed	B3 (2/3)
S30	44	2nd Vertical Transport	B3 (2/3)
S31	45	2nd Paper End	B3 (2/3)
S32	46	2nd Tray Lift	B3 (2/3)
S33	40	3rd Paper Feed	B4 (2/3)
S34	39	3rd Vertical Transport	B4 (2/3)
S35	38	3rd Paper End	B4 (2/3)
S36	37	3rd Tray Lift	B4 (2/3)
S37	137	Front Side Fence Open	E5 (2/3)
S38	140	Front Side Fence Close	E5 (2/3)
S39	127	Rear Side Fence Open	E5 (2/3)
S40	144	Rear Side Fence Close	E5 (2/3)
S41	134	Right Tray Down	E5 (2/3)
S42	132	Near End	E5 (2/3)
S43	141	Paper Height 1	E5 (2/3)
S44	133	Paper Height 2	E5 (2/3)
S45	135	Paper Height 3	E6 (2/3)
S46	131	Right Tray Paper	E6 (2/3)
S47	142	Rear Fence HP	E6 (2/3)
S48	143	Rear Fence Return	E7 (2/3)
S49	139	Left Tray Paper	E7 (2/3)
S50	111	Fusing Exit	I2 (2/3)
S51	146	Fusing Pressure Release Sensor	D6 (1/3)
S52	147	Thermal / Humidity Sensor	I6 (1/3)
Switches			
SW1	80	Front Cover Safety 1	I4 (1/3)
SW2	82	Front Cover Safety 2	I4 (1/3)
SW3	81	Front Door Safety	A4 (1/3)
SW4	77	2nd Paper Size	B6 (2/3)
SW5	78	3rd Paper Size	B6 (2/3)
SW6	75	Toner Collection Bottle Set	B7 (2/3)
SW7	74	Toner Overflow	B7 (2/3)
SW8	79	Lower Front Door Safety	D4 (2/3)
SW9	83	Main	I4 (2/3)
Solenoids			
SOL1	109	Exit Junction Gate	D6 (1/3)
SOL2	117	Reverse Trigger Roller	F6 (1/3)
SOL3	125	Duplex Junction Gate	F6 (1/3)
SOL4	105	Transfer Belt Lift	H6 (1/3)
SOL5	3	By-pass Pick-up	I6 (1/3)
SOL6	4	Guide Plate	J6 (1/3)
SOL7	30	1st Pick-up	A2 (2/3)
SOL8	31	1st Separation Roller	A3 (2/3)
SOL9	32	2nd Pick-up	B3 (2/3)
SOL10	34	2nd Separation Roller	B3 (2/3)

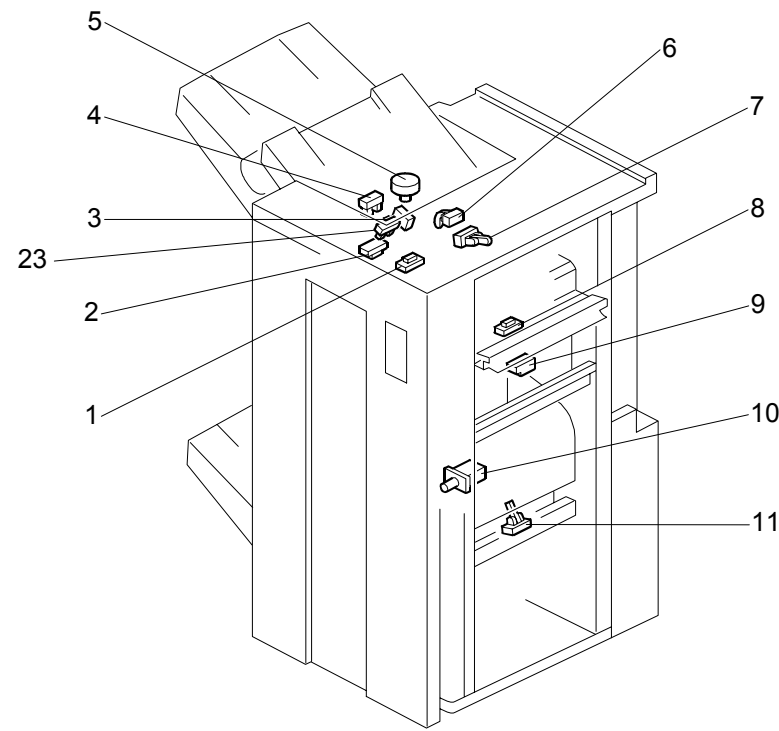
Symbol	Index No.	Description	P to P
SOL11	35	3rd Pick-up	B4 (2/3)
SOL12	36	3rd Separation Roller	B4 (2/3)
SOL13	136	Front Side Fence	E6 (2/3)
SOL14	128	Rear Side Fence	E6 (2/3)
SOL15	130	Right Tray Lock	E7 (2/3)
SOL16	129	Left Tray Lock	E7 (2/3)
Magnetic Clutches			
MC1	122	Duplex Transport	F6 (1/3)
MC2	5	By-pass Feed	I6 (1/3)
MC3	91	Toner Supply	B1 (1/3)
PCBs			
PCB1	52	Mother	E5 (3/3)
PCB3	53	Controller	E4 (3/3)
PCB4	54	IPU (Image Processing Control Unit)	H2 (1/3)
PCB5	18	VIB (Video Interface Board)	G4 (1/3)
PCB6	16	SBU (Sensor Board Unit)	F4 (1/3)
PCB7	25	Operation Panel	G4 (1/3)
PCB8	23	LDB (Laser Drive Board)	H3 (1/3)
PCB9	49	CNB (Connection Board)	C3 (1/3)
PCB10	56	DRB (Drive Board)	A5 (1/3)
PCB11	50	BCU (Base Engine Control Unit)	H5 (1/3)
PCB12	13	SDRB (Scanner Drive Board)	E4 (1/3)
PCB13	12	Lamp Regulator	J6 (1/3)
PCB14	58	PFC (Paper Feed Control)	C3 (2/3)
PCB15	57	PSU	F2 (2/3)
PCB16	149	External Controller Interface Board	G4 (3/3)
PCB17	150	CSS	F6 (3/3)
PCB18	151	Controller PSU	I5 (3/3)
Lamps			
L1	68	Quenching Lamp	F6 (1/3)
L2	10	Exposure Lamp	J6 (1/3)
L3	110	Fusing Lamp 1	I3 (2/3)
L4	106	Fusing Lamp 2	I3 (2/3)
L5	152	Fusing Lamp 3	I3 (2/3)
L6	153	PTL	F6 (1/3)
Power Packs			
PP1	51	Charge	D6 (1/3)
PP2	55	Development	H6 (1/3)
PP3	104	Transfer	H6 (1/3)
Others			
CO1	—	Key Counter (Option)	E4 (1/3)
CO2	76	Mechanical Counter	H6 (1/3)
H1	63	Drum	G1 (2/3)
H2	9	Scanner (Option)	G1 (2/3)
H3	61	Lower Tray	G1 (2/3)
H4	62	Upper Tray	G1 (2/3)
LSD1	21	Laser Synchronization Detector	J2 (1/3)
TH1	101	Thermistor 1	I2 (2/3)
TH2	114	Thermistor 2	I2 (2/3)
TS1	102	Thermostat 1	I3 (2/3)

Symbol	Index No.	Description	P to P
TS2	103	Thermostat 2	I3 (2/3)
TS3	154	Thermostat 3	I3 (2/3)
HDD1	155	HDD	

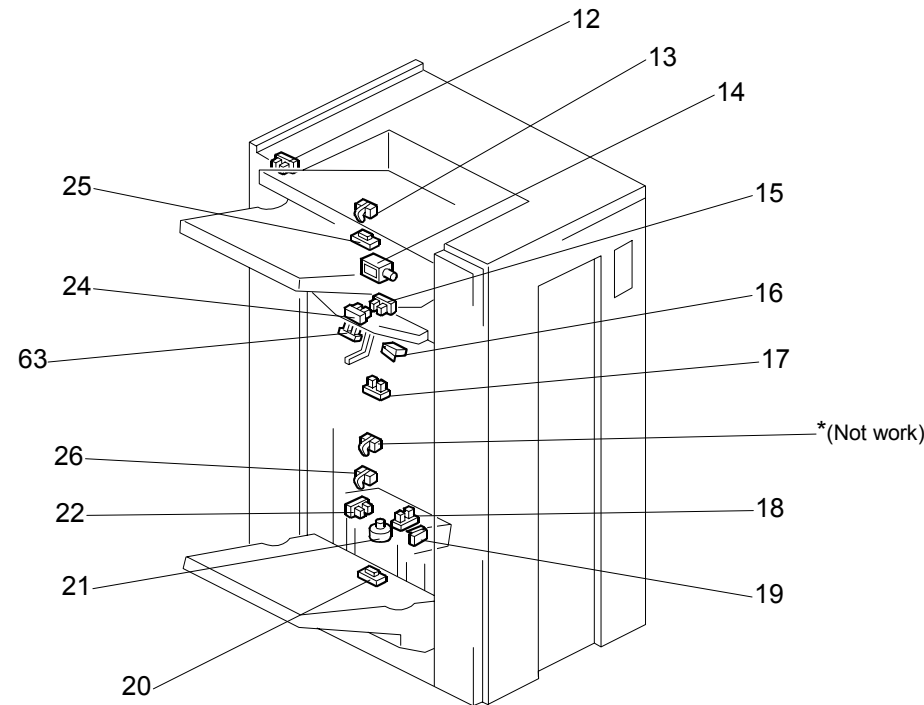
ADF

Symbol	Index No.	Description	P to P
Motors			
M1	4	Feed	J3
M2	13	Transport	J4
M3	12	Exit	J4
M4	27	Pick-up	J5
M5	5	Bottom Plate	J5
Sensors			
S1	14	Original Set	A1
S2	15	Bottom Plate HP	A1
S3	3	Bottom Plate Position	A2
S4	2	Feed Cover	A2
S5	24	Original Width 1	A2
S6	23	Original Width 2	A3
S7	22	Original Width 3	A3
S8	21	Original Width 4	A3
S9	1	Pick-up Roller HP	A4
S10	8	Original Length 3	A4
S11	7	Original Length 2	A5
S12	6	Original Length 1	A5
S13	9	DF Position	A5
S14	10	APS Start	A6
S15	26	Interval	A6
S16	16	Skew Correction	A6
S17	17	Exit	A7
S18	25	Registration	A7
PCBs			
PCB1	11	DF Main	E4
PCB2	20	CIS	G7
PCB3	19	CIS Power Supply	H7
Lamps			
L1	18	CIS	I7

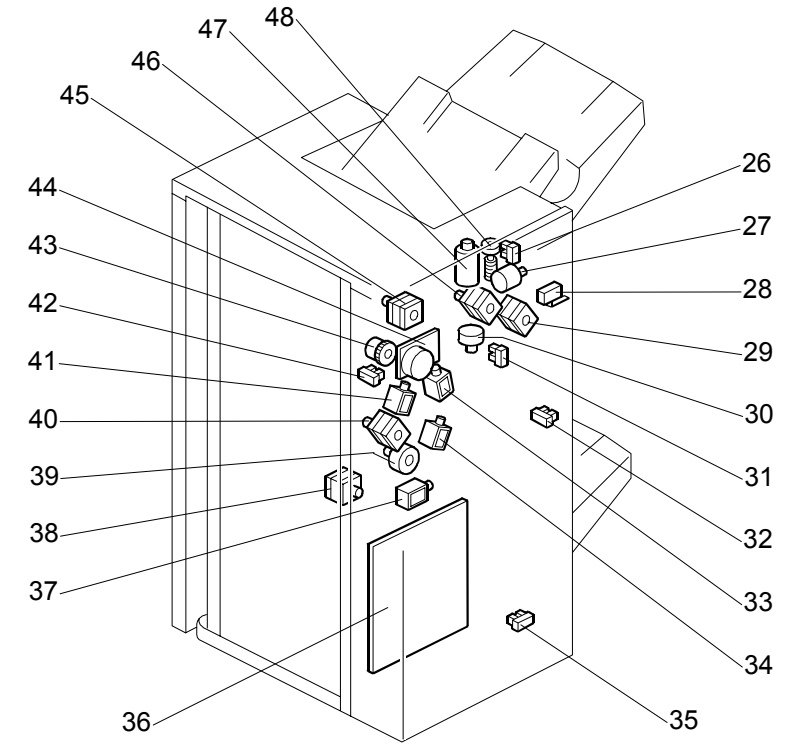
3000-SHEET BOOKLET FINISHER (B674) ELECTRICAL COMPONENT LAYOUT



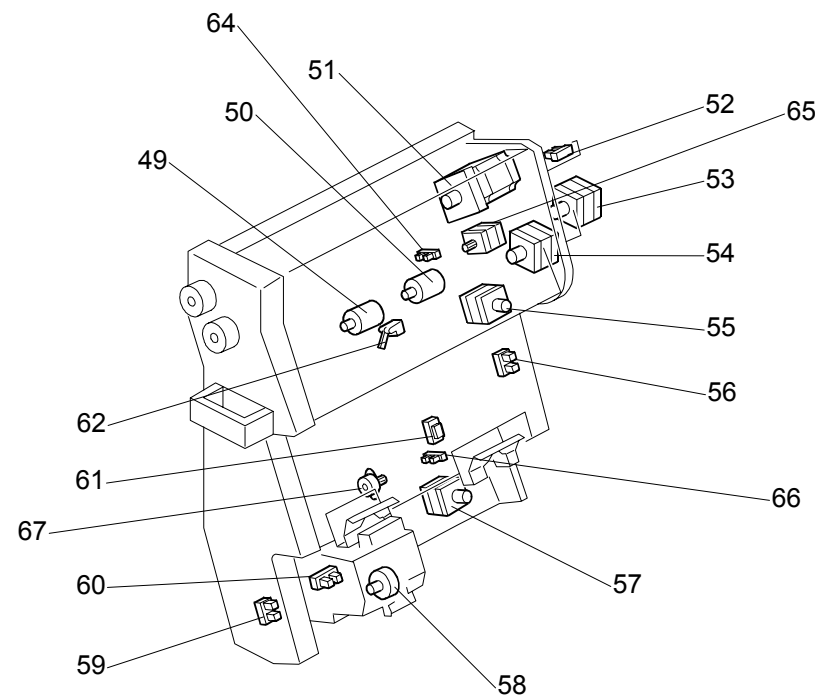
B468V102.WMF



B468V103.WMF



B468V006.WMF



B468V107.WMF

Symbol	Index No.	Description	P to P
Motors			
M1	40	Entrance Motor	J2
M2	38	Stapler Transport Motor	J3
M3	45	Proof Tray Motor	J3
M4	46	Shift Drive Motor	J3
M5	29	Exit Motor	J4
M6	39	Pre-Stack Motor	J4
M7	30	Shift Roller Motor	J5
M8	55	Jogger Motor	J5
M9	57	Stapler Movement Motor	J5
M10	58	Stapler Rotation Motor	J6
M11	54	Feed Out Belt Motor	J6
M12	5	Guide Plate Motor	J6
M14	47	Lower Tray Lift Motor	G2
M15	27	Upper Tray Lift Motor	G2
M16	48	Booklet Stapler Motor 1*	G3
M17	50	Booklet Stapler Motor 2*	G3
M18	51	Folder Roller Motor*	G4
M19	53	Folder Plate Motor*	G4
M20	21	Pressure Plate Motor*	G4
M21	44	Punch Motor	A7
M23	65	Jogger Top Fence Motor	J7
M24	67	Jogger Bottom Fence Motor	J7
Sensors			
S1	8	Finisher Entrance Sensor	A1
S2	2	Exit Sensor	A1
S3	7	Proof Tray Exit Sensor	A1
S4	11	Stapler Entrance Sensor	A2
S5	1	Shift Timing Sensor	A2

Symbol	Index No.	Description	P to P
S6	31	Shift Roller HP Sensor	A2
S7	4	Guide Plate HP Sensor	A2
S8	62	Feed Out Belt HP Sensor	A3
S9	52	Folder Plate HP Sensor*	A3
S10	18	Pressure Plate HP Sensor	A3
S11	22	Pressure Plate Lift Sensor*	A3
S12	12	Upper Tray Limit Sensor	A4
S13	32	Upper Tray Full Sensor	A4
S15	60	Stapler Rotation Sensor	A4
S16	13	Upper Tray Paper Height Sensor*	A5
S17	15	Paper Height Sensor 1* (Lower Tray)	A5
S18	24	Paper Height Sensor 2* (Lower Tray)	A5
S19	35	Lower Tray Full Sensor (Saddle Stitch Mode)	A5
S20	48	Lower Tray Encoder	A6
S21	9	Punch Hopper Full Sensor	A6
S22	42	Punch HP Sensor	A6
S23	23	Guide Plate Position Sensor	E6
S24	26	Pressure Plate Sutter Position Sensor	E6
S25	56	Jogger Fence HP Sensor	E5
S26	59	Stapler HP Sensor	E5
S27	61	Stapler Tray Paper Sensor	E5
S28	17	Booklet Exit Sensor	E6
S29	25	Upper Tray Paper Sensor*	B5
S30	20	Lower Tray Paper Sensor*	B5

Symbol	Index No.	Description	P to P
S31	64	Top Fence HP Sensor	J1
S32	66	Bottom Fence HP Sensor	J2
S33	63	Lower Tray Paper Height Sensor 3	J2
S34	6	Proof Tray Full Sensor	J2
Switches			
SW1	10	Door Switch	F5
SW2	16	Upper Limit Switch (Lower Tray)	E1
SW3	19	Pressure Plate Limit Switch*	E1
SW4	28	Upper Limit Switch* (Upper Tray)	E2
SW5	3	Guide Plate Limit Switch	E2
Solenoids			
SOL1	41	Proof Junction Gate Solenoid	G1
SOL2	33	Stapler Junction Gate Solenoid	G1
SOL3	34	Pre-Stack Junction Gate Solenoid	G1
SOL4	37	Positioning Roller Solenoid	E1
SOL5	14	Upper Tray Lift Solenoid *	A4
Magnetic Clutches			
CL1	43	Punch Clutch	A6
PCBs			
PCB1	36	Main Board	D, H