

D176/D177 POINT TO POINT DIAGRAM (1 / 2)

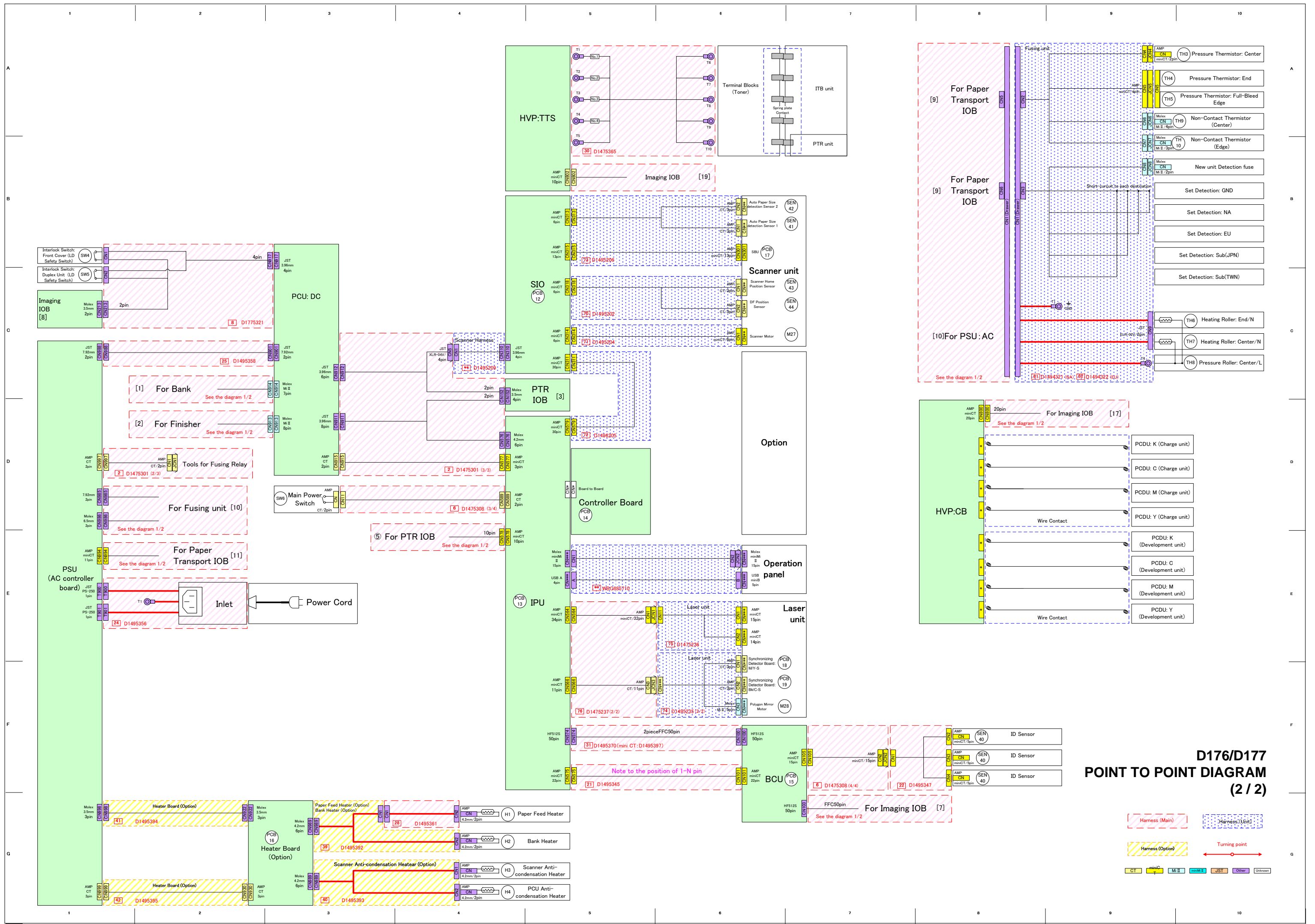
CT miniCT M II M I II JST Other Unknown

Harness(Main) Harness(Optional) Harness(Units)

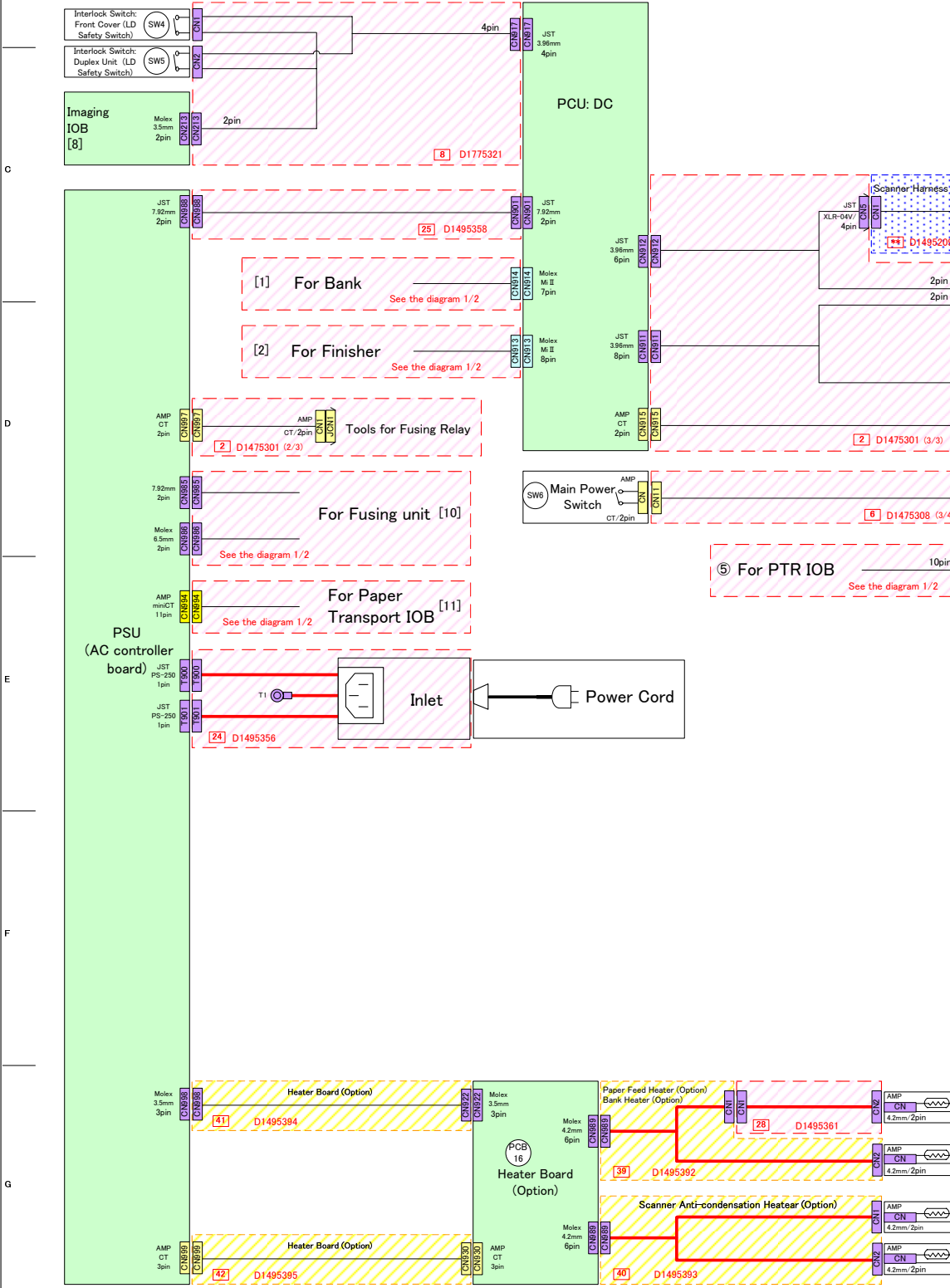
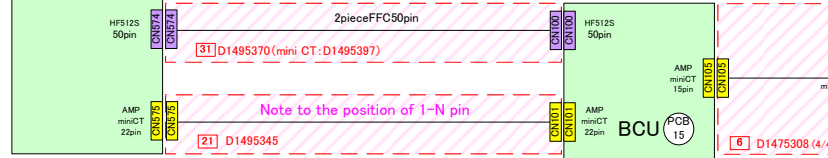
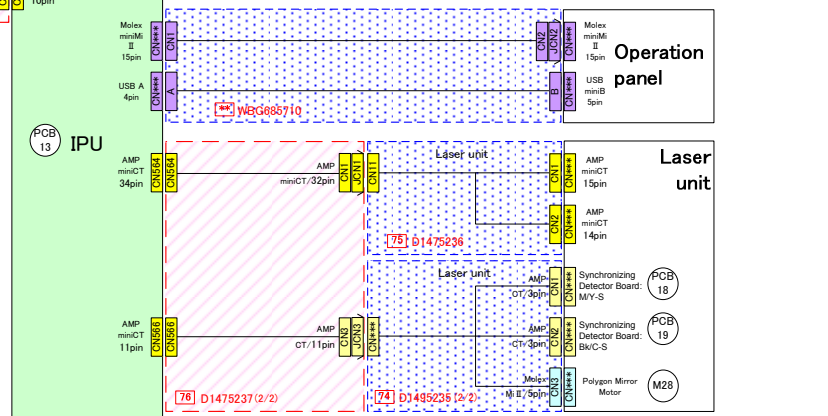
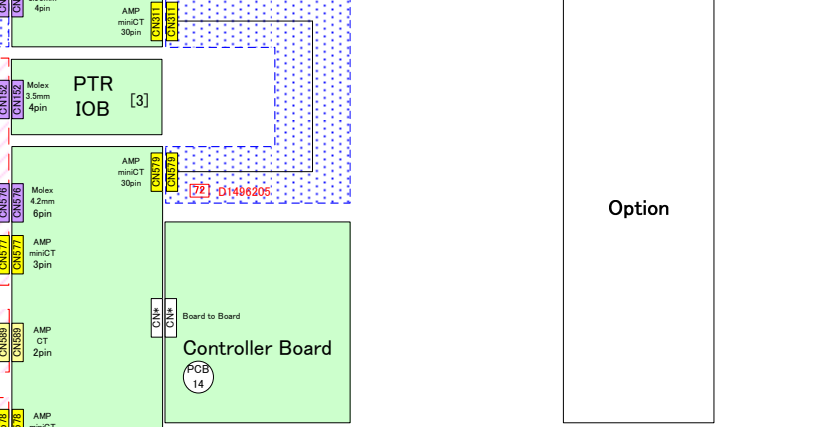
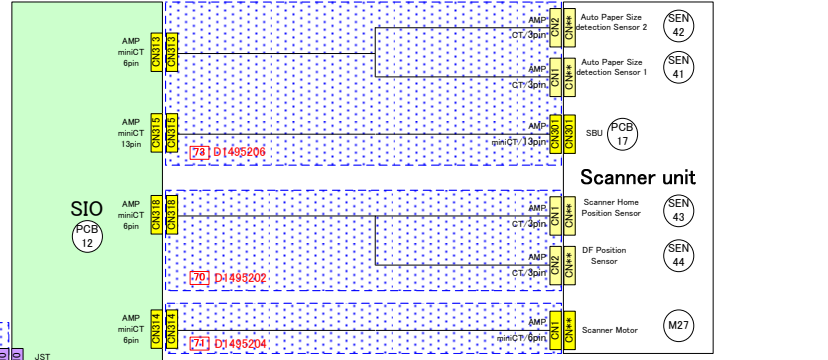
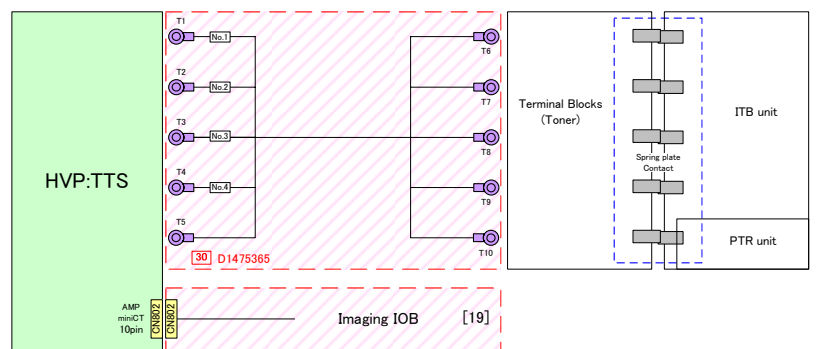
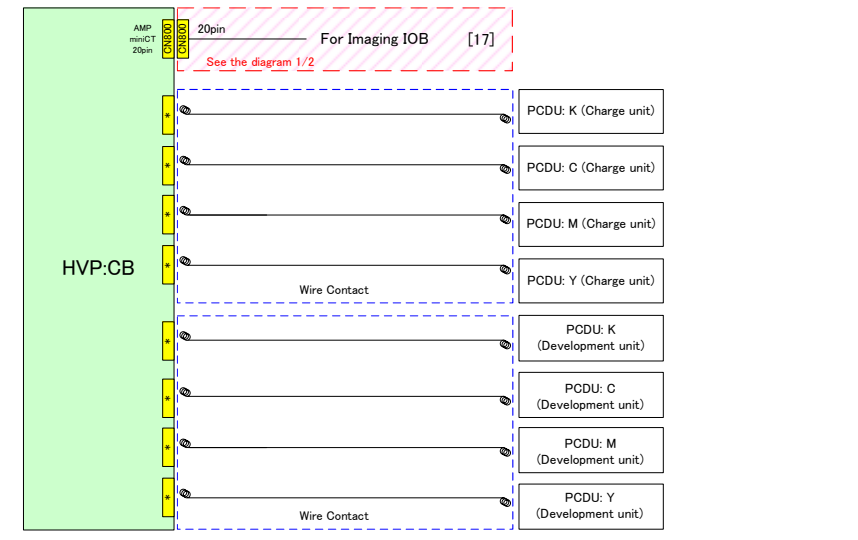
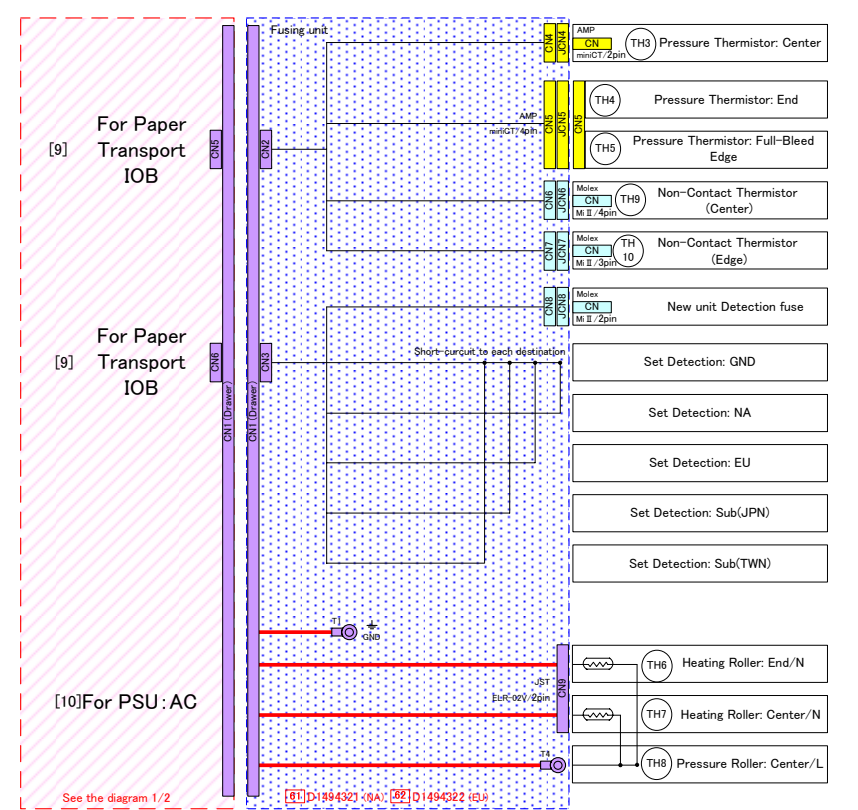
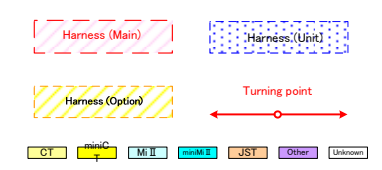
→ Turning point

See the diagram 1/2

See the diagram 1/2



D176/D177 POINT TO POINT DIAGRAM (2 / 2)



D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
1	Paper Transport IOB	CN155	1	Fusing Cooling Fan: +24V (CTRL)	Fusing Cooling Fan	CN1	3	CN9, CN15, CN16, CN17, CN18, CN19: With relay connector
			2	Fusing Cooling Fan: LOCK Sensor Signal			2	
			3	Fusing Cooling Fan: GND			1	
			4	Registration Sensor: GND	Harness No.51 D1492556	CN2	3	
			5	Registration Sensor: Sensor Signal			2	
			6	Registration Sensor: +5V			1	
			7	Fusing Motor: GAIN			10	
			8	Fusing Motor: CLOCK			9	
			9	Fusing Motor: BRK			8	
			10	Fusing Motor: ROTATE	Fusing Motor	CN3	7	
			11	Fusing Motor: ON			6	
			12	Fusing Motor: Fusing Motor LOCK			5	
			13	Fusing Motor: GND			4	
			14	Fusing Motor: GND			3	
			15	Fusing Motor: 24VS2			2	
			16	Fusing Motor: 24VS2			1	
			17	N.C.			N.C.	
	18	Right Door Open/Close Switch: SW Terminal2	Right Door Open/Close	CN4	2			
	19	Right Door Open/Close Switch: SW Terminal1			1			
	Paper Transport IOB	CN157	1	Registration Motor: ENC: A Phase	Registration Motor	CN5	8	
			2	Registration Motor: ENC: B Phase			7	
			3	Registration Motor: +5V			6	
			4	Registration Motor: CW/CCW (Low)			5	
			5	Registration Motor: PWM			4	
			6	Registration Motor: BRK (Low)			3	
			7	Registration Motor: GND			2	
			8	Registration Motor: +24VS2			1	
			9	Paper Exit Motor: ENC: A Phase	Paper Exit Motor	CN6	8	
			10	Paper Exit Motor: ENC: B Phase			7	
			11	Paper Exit Motor: +5V			6	
			12	Paper Exit Motor: CW/CCW (Low)			5	
			13	Paper Exit Motor: PWM			4	
14			Paper Exit Motor: BRK (Low)	3				
15			Paper Exit Motor: GND	2				
16	Paper Exit Motor: +24VS2	1						
17	Paper Feed Motor: ENC: A Phase	Paper Feed Motor	CN7	8				
18	Paper Feed Motor: ENC: B Phase			7				
19	Paper Feed Motor: +5V			6				
20	Paper Feed Motor: CW/CCW (Low)			5				
21	Paper Feed Motor: PWM			4				
22	Paper Feed Motor: BRK (Low)			3				
23	Paper Feed Motor: GND			2				
24	Paper Feed Motor: +24VS2	1						
25	Transport Motor: ENC: A Phase	Transport Motor	CN8	8				
26	Transport Motor: ENC: B Phase			7				
27	Transport Motor: +5V			6				
28	Transport Motor: CW/CCW (Low)			5				
29	Transport Motor: PWM			4				
30	Transport Motor: BRK (Low)			3				
31	Transport Motor: GND			2				
32	Transport Motor: +24VS2			1				

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
1	Paper Transport IOB	CN159	1	Pick-up Solenoid (1st Feed Tray): Terminal1	Harness No.52 D1752708	CN9	14	CN9, CN15, CN16, CN17, CN18, CN19: With relay connector
			2	Pick-up Solenoid (1st Feed Tray): Terminal2			13	
			3	Paper Feed Sensor (1st Feed Tray): GND			12	
			4	Paper Feed Sensor (1st Feed Tray): Sensor Signal			11	
			5	Paper Feed Sensor (1st Feed Tray): +5V			10	
			6	Transport Sensor (1st Feed Tray): GND			9	
			7	Transport Sensor (1st Feed Tray): Sensor Signal			8	
			8	Transport Sensor (1st Feed Tray): +5V			7	
			9	Paper End Sensor (1st Feed Tray): GND			6	
			10	Paper End Sensor (1st Feed Tray): Sensor Signal			5	
			11	Paper End Sensor (1st Feed Tray): +5V			4	
			12	Limit Sensor (1st Feed Tray): GND			3	
			13	Limit Sensor (1st Feed Tray): Sensor Signal			2	
			14	Limit Sensor (1st Feed Tray): +5V			1	
	Paper Transport IOB	CN161	1	N.C.	Harness No.53 D1476237	CN10	3	
			2	N.C.			2	
			3	Fusing Entrance Sensor: GND			1	
			4	Fusing Entrance Sensor: Sensor Signal			3	
			5	Fusing Entrance Sensor: +5V			2	
			6	PTR Open/Close Sensor: GND			1	
			7	PTR Open/Close Sensor: Sensor Signal			3	
			8	PTR Open/Close Sensor: +5V			2	
			9	N.C.			-	
			10	N.C.			-	
			11	N.C.	-			
			12	N.C.	-			
			13	Duplex Entrance Motor: ENC: A Phase	Duplex Entrance Motor	CN14	8	
			14	Duplex Entrance Motor: ENC: B Phase			7	
			15	Duplex Entrance Motor: +5V			6	
			16	Duplex Entrance Motor: CW/CCW (Low)			5	
			17	Duplex Entrance Motor: PWM			4	
			18	Duplex Entrance Motor: BRK (Low)			3	
			19	Duplex Entrance Motor: GND			2	
			20	Duplex Entrance Motor: +24VS2			1	
			21	By-pass/Duplex Motor: ENC: A Phase	Harness No.54 D1494696	CN15	18	
			22	By-pass/Duplex Motor: ENC: B Phase			17	
			23	By-pass/Duplex Motor: +5V			16	
			24	By-pass/Duplex Motor: CW/CCW (Low)			15	
			25	By-pass/Duplex Motor: PWM			14	
			26	By-pass/Duplex Motor: BRK (Low)			13	
27	By-pass/Duplex Motor: GND	12						
28	By-pass/Duplex Motor: +24VS2	11						
29	Duplex Entrance Sensor: GND	10						
30	Duplex Entrance Sensor: Sensor Signal	9						
31	Duplex Entrance Sensor: +5V	8						
32	Duplex Exit Sensor: GND	7						
33	Duplex Exit Sensor: Sensor Signal	6						
34	Duplex Exit Sensor: +5V	5						
35	Duplex Unit Open/Close Sensor: SW Terminal2	4						
36	Duplex Unit Open/Close Sensor: SW Terminal1	3						
37	N.C.	2						
38	N.C.	1						
39	N.C.	-						
40	N.C.	-						

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
1	Paper Transport IOB	CN162	1	By-pass Pick-up Solenoid: Terminal2 (PWM)	Model c/d: Harness No.55 D1492661	CN16	14	CN9, CN15, CN16, CN17, CN18, CN19: With relay connector
			2	By-pass Pick-up Solenoid: Terminal1 (+24VS2)			13	
			3	By-pass Paper End Sensor: GND			12	
			4	By-pass Paper End Sensor: Sensor Signal			11	
			5	By-pass Paper End Sensor: +5V			10	
			6	By-pass Paper Length Sensor: SW Terminal2			9	
			7	By-pass Paper Length Sensor: SW Terminal1			8	
			8	By-pass Paper Length Sensor: COM Terminal			7	
			9	By-pass Paper Length Sensor: SW Terminal4			6	
			10	By-pass Paper Length Sensor: SW Terminal5			5	
			11	By-pass Paper Length Sensor: SW Terminal3			4	
			12	By-pass Paper Size Sensor: GND			3	
			13	By-pass Paper Size Sensor: Sensor Signal			2	
			14	By-pass Paper Size Sensor: +5V			1	
			15	N.C.			-	
			16	Paper Exit Solenoid: Terminal1 (+24VS2)	15			
			17	Paper Exit Solenoid: Terminal2 (PWM)	14			
			18	Inversion Sensor: GND	13			
			19	Inversion Sensor: Sensor Signal	12			
			20	Inversion Sensor: +5V	11			
			21	Paper Exit Sensor: GND	10			
			22	Paper Exit Sensor: Sensor Signal	9			
			23	Paper Exit Sensor: +5V	8			
			24	Exit Tray Full Detection Sensor: GND	7			
			25	Exit Tray Full Detection Sensor: Sensor Signal	6			
			26	Exit Tray Full Detection Sensor: +5V	5			
			27	N.C.	-			
			28	N.C.	-			
			29	N.C.	-			
			30	N.C.	-			
	Paper Transport IOB	CN167	1	Inversion Motor: XB Phase	Harness No.57 D1774499	CN17	4	
			2	Inversion Motor: B Phase			3	
			3	Inversion Motor: XA Phase			2	
			4	Inversion Motor: A Phase			1	
	Paper Transport IOB	CN156	A1	Set Detection: Reserved: TWN	100V Model Harness No.23 D1495341	CN18A	A18	
			A2	Set Detection: Reserved: DOM			A17	
			A3	Set Detection: EU			A16	
			A4	Set Detection: NA			A15	
			A5	Set Detection (C): GND			A14	
			A6	Set Detection (P): GND			A13	
			A7	N.C.			A12	
			A8	New unit Detection Fuse			A11	
			A9	New unit Detection Fuse: GND			A10	
			A10	Fusing Exit Sensor: GND			A9	
			A11	Fusing Exit Sensor: Sensor Signal			A8	
A12			Fusing Exit Sensor: +5V	A7				
A13			Thermopile (Edge): +5V	A6				
A14			Thermopile (Edge): GND	A5				
A15			Thermopile (Edge): FB	A4				
A16			Thermopile (Center): +5V	A3				
A17			Thermopile (Center): GND	A2				
A18			Thermopile (Center): FB	A1				
B1			Fusing Shield Position Sensor 2: GND	B18				
B2			Fusing Shield Position Sensor 2: Sensor Signal	B17				
B3			Fusing Shield Position Sensor 2 +5V	B16				
B4			Fusing Shield Position Sensor 1: GND	B15				
B5			Fusing Shield Position Sensor 1: Sensor Signal	B14				
B6			Fusing Shield Position Sensor 1: +5V	B13				
B7			Non-Contact Thermistor (Edge): Compensation :	B12				
B8			Non-Contact Thermistor (Edge): Detection: FB	B11				
B9			Non-Contact Thermistor (Edge): GND	B10				
B10			Non-Contact Thermistor (Center): Compensation :	B9				
B11			Non-Contact Thermistor (Center): Detection: FB	B8				
B12			Non-Contact Thermistor (Center): GND	B7				
B13			Pressure Thermistor: Expanded End: FB	B6				
B14			Pressure Thermistor: Expanded End: GND	B5				
B15			Pressure Thermistor: End: FB	B4				
B16			Pressure Thermistor: End: GND	B3				
B17	Pressure Thermistor: Center: FB	B2						
B18	Pressure Thermistor: Center: GND	B1						
Paper Transport IOB	CN168	1	Fusing Shield Drive Motor: XB Phase (B3)	Harness No.23 D1495341 (100V Model)	CN19	4		
		2	Fusing Shield Drive Motor: B Phase (B1)			3		
		3	Fusing Shield Drive Motor: A Phase (A1)			2		
		4	Fusing Shield Drive Motor: XA Phase (A3)			1		
		5	N.C.	-				

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
2	Paper Transport IOB	CN153	1	AC driver: +24V	PSU (AC)	CN994	11	CN1, CN2, CN5: With relay connector
			2	AC driver: GND			10	
			3	AC driver: Zero Cross Signal1			9	
			4	AC driver: Fusing Relay Trigger Signal1			8	
			5	AC driver: Anti-condensation Heater Relay Trigger Signal			7	
			6	AC driver: AC Voltage Detection Signal			6	
			7	AC driver: Fusing Heater Trigger Signal			5	
			8	AC driver: Fusing Relay Trigger Signal2			4	
			9	AC driver: Fusing Heater1 Trigger Signal			3	
			10	AC driver: Fusing Relay Trigger Signal2			2	
			11	AC driver: Zero Cross Signal2			1	
			12	PSU Cooling Fan: +24V (CTRL)	PSU Cooling Fan	CN2	3	
			13	PSU Cooling Fan: LOCK Sensor Signal			2	
			14	PSU Cooling Fan: GND			1	
			15	N.C.				
			16	N.C.				
			17	N.C.				
	Paper Transport IOB	CN164	1	IPU: GND	IPU	CN578	10	
			2	IPU: +5VE			9	
			3	IPU: +24V			8	
			4	IPU: +24V			7	
			5	IPU: GND			6	
			6	IPU: GND			5	
			7	IPU: GND			4	
			8	IPU: +24VS1			3	
			9	IPU: +24VS2			2	
			10	IPU: GND			1	
	Paper Transport IOB	CN253	1	MKB: +5V	MKB	CN750	13	
			2	MKB: Key Card: Set Detection			12	
			3	MKB: b0 (Size1)			11	
			4	MKB: b1 (Size2)			10	
			5	MKB: b2 (Size3)			9	
			6	MKB: b3 (Size4)			8	
			7	MKB: b4 (Mode1)			7	
			8	MKB: b5 (Mode2)			6	
			9	MKB: b6 (Duplex)			5	
			10	MKB: b7 (Motor)			4	
			11	MKB: GND			3	
			12	MKB: Key Card: CTRL			2	
			13	MKB: For Optional Counter: +24V			1	
	Paper Transport IOB	CN254	1	Key-counter: GND	Key Counter	CN5	4	
			2	Key-counter: Key Counter: Set Detection			3	
			3	Key Counter: For Optional Counter: +24V			2	
			4	Key-counter: Key Counter: CTRL			1	
	Tools	CN1	1	PSU (AC Controller Board): JIGU-TRG	PSU (AC)	CN997	2	
2			PSU (AC Controller Board): JIGU-24V	1				
IPU	CN577	1	PSU: DC: PONENG N	PSU (DC)	CN915	2		
		2	N.C.					
		3	PSU: DC: GND			1		
Harness No.58 D1495209	CN4	1	PSU: PGND	PSU (DC)	CN912	1		
		2	PSU: PGND ADF			2		
		3	PSU: +24V ADF			4		
		4	PSU: +24V			5		
Paper Transport IOB	CN152	1	PSU: +24V	PSU (DC)	CN911	6		
		2	PSU: GND (+24V)			3		
		3	PSU: GND (+5V)			3		
IPU	CN576	4	PSU: +5V	PSU (DC)	CN911	4		
		1	PSU: 5V			7		
		2	PSU: 5VE			6		
		3	PSU: 5VE			5		
		4	PSU: GND			3		
		5	PSU: GND			2		
6	PSU: GND	1						

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
3	Image Processing IOB	CN207	1	Paper Transport IOB: GND	Paper Transport IOB	CN163	18	
			2	Paper Transport IOB: GND			17	
			3	Paper Transport IOB: +24VS2			16	
			4	Paper Transport IOB: +24VS2			15	
			5	Paper Transport IOB: +24VS2			14	
			6	Paper Transport IOB: +24VS2			13	
			7	Paper Transport IOB: +24VS1			12	
			8	Paper Transport IOB: GND			11	
			9	Paper Transport IOB: GND			10	
			10	Paper Transport IOB: GND			9	
			11	Paper Transport IOB: GND			8	
			12	Paper Transport IOB: GND			7	
			13	Paper Transport IOB: GND			6	
			14	Paper Transport IOB: +5V			5	
			15	Paper Transport IOB: +24V			4	
			16	Paper Transport IOB: +24V			3	
			17	Paper Transport IOB: +24V			2	
			18	Paper Transport IOB: GND			1	
4	Paper Transport IOB	CN256	N.C.	Bank Drawer	CN1	8		
			1			Bank: Bank: RXD		7
			2			Bank: Bank: TXD		6
			3			Bank: GND		5
			4			Bank: GND		4
			5			Bank: +5V		3
			6			Bank: +5V		2
	7	Bank: GND	1					
	PSU (DC)	CN914	1	PSU: GND	Bank Drawer	CN2		7
			2	PSU: GND				6
			3	PSU: GND				5
			4	PSU: 24V				4
			5	PSU: 24V				3
			6	PSU: 24V				2
7			PSU: 24V	1				

Harness No.	Connector (From)			Signal Information	Connector (To)			Note		
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.			
5	Paper Transport IOB	CN158	1	Lift Motor (2nd Feed Tray): Sensor: Paper Remaining Detection	Lift Motor (2nd Feed Tray): Sensor	CN1	5	CN5: With relay connector		
			2	Lift Motor (2nd Feed Tray): Sensor: Paper Remaining Detection: GND			4			
			3	Lift Motor (2nd Feed Tray): Sensor: Paper Remaining Detection			3			
			4	Lift Motor (2nd Feed Tray): Sensor: CTRL -			2			
			5	Lift Motor (2nd Feed Tray): Sensor: CTRL +			1			
			6	Tray Set Switch (2nd Feed Tray): GND			2			
			Paper Transport IOB	CN160	7	Tray Set Switch (2nd Feed Tray): SW Terminal1	Tray Set Switch (2nd Feed Tray)		CN2	1
					8	Size Switch (2nd Feed Tray): SW Terminal1				5
					9	Size Switch (2nd Feed Tray): SW Terminal2	4			
					10	Size Switch (2nd Feed Tray): SW Terminal3	3			
					11	Size Switch (2nd Feed Tray): GND	2			
					12	Size Switch (2nd Feed Tray): SW Terminal4	1			
					13	N.C.				
					14	N.C.				
	15	Pick-up Solenoid (2nd Feed Tray): +24VS2			14					
	16	Pick-up Solenoid (2nd Feed Tray): PWM			13					
	17	Paper Feed Sensor (2nd Feed Tray): GND			12					
	18	Paper Feed Sensor (2nd Feed Tray): Sensor			11					
	19	Paper Feed Sensor (2nd Feed Tray): +5V			10					
	20	Transport Sensor (2nd Feed Tray): GND			9					
	21	Transport Sensor (2nd Feed Tray): Sensor Signal	8							
	22	Transport Sensor (2nd Feed Tray): +5V	7							
	23	Paper End Sensor (2nd Feed Tray): GND	6							
	24	Paper End Sensor (2nd Feed Tray): Sensor Signal	5							
	25	Paper End Sensor (2nd Feed Tray): +5V	4							
	26	Limit Sensor (2nd Feed Tray): GND	3							
	27	Limit Sensor (2nd Feed Tray): Sensor Signal	2							
	28	Limit Sensor (2nd Feed Tray): +5V	1							
Paper Transport IOB	CN160	1	Lift Motor (1st Feed Tray): Sensor: Paper Remaining Detection	Lift Motor (1st Feed Tray): Sensor	CN6	5				
		2	Lift Motor (1st Feed Tray): Sensor: Paper Remaining Detection: GND			4				
		3	Lift Motor (1st Feed Tray): Sensor: Paper Remaining Detection			3				
		4	Lift Motor (1st Feed Tray): Sensor: CTRL -			2				
		5	Lift Motor (1st Feed Tray): Sensor: CTRL +			1				
		6	Tray set Switch (1st Feed Tray): GND			2				
		7	Tray set Switch (1st Feed Tray): SW Terminal1			1				

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
6	BCU	CN105	1	ID Sensor: 3.3V	Harness No.22 D1495347	CN2	15	CN1, CN2, CN5, CN6, CN8: With relay connector
			2	ID Sensor: GND			14	
			3	ID Sensor: FRONT LED Drive			13	
			4	ID Sensor: FRONT Diffuse Reflection Sensor			12	
			5	ID Sensor: FRONT Specular Reflection Sensor			11	
			6	ID Sensor: 3.3V			10	
			7	ID Sensor: GND			9	
			8	ID Sensor: CENTER LED Drive			8	
			9	ID Sensor: CENTER Diffuse Reflection Sensor			7	
			10	ID Sensor: CENTER Specular Reflection Sensor Output			6	
			11	ID Sensor: 3.3V			5	
			12	ID Sensor: GND			4	
			13	ID Sensor: REAR LED Drive			3	
			14	ID Sensor: REAR Diffuse Reflection Sensor			2	
			15	ID Sensor: REAR Specular Reflection Sensor			1	
	Paper Transport IOB	CN166	1	Pressure Roller HP Sensor: GND	Pressure Roller HP Sensor	CN3	3	
			2	Pressure Roller HP Sensor: Signal			2	
			3	Pressure Roller HP Sensor: +5V			1	
	Image Processing IOB	CN209	1	Temperature/Humidity Sensor: Temperature FB	Temperature/Humidity Sensor	CN4	4	
			2	Temperature/Humidity Sensor K: GND			3	
			3	Temperature/Humidity Sensor K: Humidity FB			2	
			4	Temperature/Humidity Sensor K: +3.3V			1	
			5	Mainframe Exhaust/Drive Cooling/Developing Air Intake Fan/Right: CTRL	Developing Air Intake Fan/Right	CN5	3	
			6	Developing Air Intake Fan/Right: LOCK			2	
			7	Developing Air Intake Fan/Right: GND	1			
			8	Developing Air Intake Fan/Left/Toner Supply Cooling Fan: CTRL	Developing Air Intake Fan/Left	CN6	3	
			9	Developing Air Intake Fan/Left: LOCK			2	
			10	Developing Air Intake Fan/Left: GND			1	
			11	Paper Exit Cooling Fan: CTRL	Exit Exhaust Cooling Fan	CN8	3	
			12	Paper Exit Cooling Fan: LOCK			2	
			13	Paper Exit Cooling Fan: GND			1	
			14	N.C.				
			15	N.C.				
			16	N.C.				
			17	N.C.				
			18	N.C.				
			19	N.C.				
	Image Processing IOB	CN251	1	1bin Tray: Mainframe Inversion Sensor Output	1bin Tray	CN10	6	
			2	1bin Tray: Paper Remaining Sensor			5	
			3	1bin Tray: Set Detection Mechanism			4	
			4	1bin Tray: GND			3	
			5	1bin Tray: +5VE LPS			2	
6			1bin Tray: +5V	1				
IPU	CN589	1	Main SW: ACSW_STAT_ON_N_ACSW	Main SW	CN11	2		
		2	Main SW: ACSWOFF_ACSW			1		
1bin LED	CN1	1	1bin LED: CATHODE	1bin Tray	CN12	2		
		2	1bin LED: ANODE			1		

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
7								
8	PSU (DC)	CN917	1	PSU: DC: 24V	Interlock SW/1	CN1	1	
			2	PSU: DC: 24V			Interlock SW/2	
	Image Processing IOB	CN213	1	Interlock Switch: Front Cover (LD Safety Switch): +24VS1	Interlock SW/1	CN1	2	
			2	Interlock Switch: Duplex Unit (LD Safety Switch): +24VS2			Interlock SW/2	
9	Image Processing IOB	CN217		N.C.	Lattice	CN1	8	
			1	Finisher: RXD			7	
				N.C.			6	
			2	Finisher: TXD			5	
				N.C.			4	
				N.C.			3	
	PSU (DC)	CN913	3	Finisher: GND	Lattice	CN2	2	
			4	Finisher: GND			1	
			1	PSU: DC: GND			9	
			2	PSU: DC: GND			8	
			3	PSU: DC: GND			7	
			4	PSU: DC: GND			6	
			5	PSU: DC: 24V			5	
6	PSU: DC: 24V	4						
		7	PSU: DC: 24V	3				
		8	PSU: DC: 24V	2				
			N.C.	1				

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
10	Image Processing IOB	CN203	1	Toner Bottle Drive Motor: K: CTRL B	Toner Bottle Drive Motor/K	CN1	2	CN1, CN2, CN3, CN4, CN14, CN18: With relay connector
			2	Toner Bottle Drive Motor: K: +24VS1	Toner Bottle Drive Motor/K	CN1	1	
			3	Toner Bottle Drive Motor: C: CTRL B	Toner Bottle Drive Motor/C	CN2	2	
			4	Toner Bottle Drive Motor: C: +24VS1	Toner Bottle Drive Motor/C	CN2	1	
			5	Toner Bottle Drive Motor: M: CTRL B	Toner Bottle Drive Motor/M	CN3	2	
			6	Toner Bottle Drive Motor: M: +24VS1	Toner Bottle Drive Motor/M	CN3	1	
			7	Toner Bottle Drive Motor: Y: CTRL B	Toner Bottle Drive Motor/Y	CN4	2	
			8	Toner Bottle Drive Motor: Y: +24VS1	Toner Bottle Drive Motor/Y	CN4	1	
			9	N.C.				
			10	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN5	4	
			11	Toner Bottle ID Chip: GND	Toner Bottle ID Chip	CN5	3	
			12	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN5	2	
			13	Toner Bottle ID Chip: +5V_HST	Toner Bottle ID Chip	CN5	1	
			14	N.C.				
			15	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN6	4	
			16	Toner Bottle ID Chip: GND	Toner Bottle ID Chip	CN6	3	
			17	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN6	2	
			18	Toner Bottle ID Chip: +5V_HST	Toner Bottle ID Chip	CN6	1	
			19	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN7	4	
			20	Toner Bottle ID Chip: GND	Toner Bottle ID Chip	CN7	3	
			21	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN7	2	
			22	Toner Bottle ID Chip: +5V_HST	Toner Bottle ID Chip	CN7	1	
			23	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN8	4	
			24	Toner Bottle ID Chip: GND	Toner Bottle ID Chip	CN8	3	
			25	Toner Bottle ID Chip: I2C	Toner Bottle ID Chip	CN8	2	
			26	Toner Bottle ID Chip: +5V_HST	Toner Bottle ID Chip	CN8	1	
	1	HVP TTS: +24VS2	CN219	HVP: TTS	CN802	10		
	2	HVP TTS: GND				9		
	3	HVP TTS: Transfer/SC Detection				8		
	4	HVP TTS: Paper Transfer (-)/Output Voltage FB				7		
	5	HVP TTS: Paper Transfer (-)/PWM				6		
	6	HVP TTS: Paper Transfer (+)/PWM				5		
7	HVP TTS: Image Transfer/K/PWM	4						
8	HVP TTS: Image Transfer/C/PWM	3						
9	HVP TTS: Image Transfer/M/PWM	2						
10	HVP TTS: Image Transfer/Y/PWM	1						
11	N.C.							
12	N.C.							

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
10	Image Processing IOB	CN205	1	Toner End Sensor: K: GND	Harness No.19 D1495334	CN9	3	CN1, CN2, CN3, CN4, CN14, CN18: With relay connector
			2	Toner End Sensor: K: Signal	Harness No.19 D1495334	CN9	2	
			3	Toner End Sensor: K: +5VTEK	Harness No.19 D1495334	CN9	1	
			4	Toner End Sensor: C: GND	Harness No.19 D1495334	CN10	3	
			5	Toner End Sensor: C: Signal	Harness No.19 D1495334	CN10	2	
			6	Toner End Sensor: C: +5VTEFC	Harness No.19 D1495334	CN10	1	
			7	Toner End Sensor: M: GND	Harness No.19 D1495334	CN13	3	
			8	Toner End Sensor: M: Signal	Harness No.19 D1495334	CN13	2	
			9	Toner End Sensor: M: +5VTEFC	Harness No.19 D1495334	CN13	1	
			10	Toner End Sensor: Y: GND	Harness No.19 D1495334	CN17	3	
			11	Toner End Sensor: Y: Signal	Harness No.19 D1495334	CN17	2	
			12	Toner End Sensor: Y: +5VTEFC	Harness No.19 D1495334	CN17	1	
			13	ITB Contact and Release Sensor: GND	Harness No.18 D1495333	CN14	3	
			14	ITB Contact and Release Sensor: Signal	Harness No.18 D1495333	CN14	2	
			15	ITB Contact and Release Sensor: +5V	Harness No.18 D1495333	CN14	1	
			16	Imaging Temperature Sensor: GND	Imaging Temperature Sensor	CN18	2	
			17	Imaging Temperature Sensor: Imaging Temperature Sensor/FB	Imaging Temperature Sensor	CN18	1	
	Image Processing IOB	CN218	1	Bridge unit/Shift Tray/Exit Tray: GND	Bridge unit/Exit Tray	CN19	10	
			2	Bridge unit/Shift Tray/Exit Tray: +5V			9	
			3	Bridge unit/Shift Tray/Exit Tray: CBU_SS1SET_I			8	
			4	Bridge unit/Shift Tray/Exit Tray:			7	
			5	Bridge unit/Shift Tray/Exit Tray:			6	
			6	Bridge unit/Shift Tray/Exit Tray:			5	
			7	Bridge unit/Shift Tray/Exit Tray: CBUCVMTCTL_O			4	
			8	Bridge unit/Shift Tray/Exit Tray: GND			3	
			9	Bridge unit/Shift Tray/Exit Tray: +24V			2	
				N.C.			1	
			10	Bridge unit/Exit Tray: +24V			9	
			11	Bridge unit/Exit Tray: CBU+5V_FU_I			8	
			12	Bridge unit/Exit Tray: CBUCVMTENA_N_O			7	
			13	Bridge unit/Exit Tray: CBU_SS2SET_I			6	
			14	Bridge unit/Exit Tray: CBUDVSLPWM_O			5	
			15	Bridge unit/Exit Tray: CBUCVMTCLK_O			4	
			16	Bridge unit/Exit Tray: CBU+24V_FU_I			3	
17	Bridge unit/Exit Tray: CBTOCSNSNS_I	2						
18	Bridge unit/Exit Tray: CBEOCSNSNS_I	1						
11	Image Processing IOB	CN222	1	Toner Bottle Drive Motor: K: A Phase	Toner Bottle Drive Motor: K	CN1	4	
			2	Toner Bottle Drive Motor: K: XA Phase	Toner Bottle Drive Motor: K	CN1	3	
			3	Toner Bottle Drive Motor: K: B Phase	Toner Bottle Drive Motor: K	CN1	2	
			4	Toner Bottle Drive Motor: K: XB Phase	Toner Bottle Drive Motor: K	CN1	1	
			5	Toner Bottle Drive Motor: C: A Phase	Toner Bottle Drive Motor: C	CN2	4	
			6	Toner Bottle Drive Motor: C: XA Phase	Toner Bottle Drive Motor: C	CN2	3	
			7	Toner Bottle Drive Motor: C: B Phase	Toner Bottle Drive Motor: C	CN2	2	
			8	Toner Bottle Drive Motor: C: XB Phase	Toner Bottle Drive Motor: C	CN2	1	
			9	Toner Bottle Drive Motor: M: A Phase	Toner Bottle Drive Motor: M	CN3	4	
			10	Toner Bottle Drive Motor: M: XA Phase	Toner Bottle Drive Motor: M	CN3	3	
			11	Toner Bottle Drive Motor: M: B Phase	Toner Bottle Drive Motor: M	CN3	2	
			12	Toner Bottle Drive Motor: M: XB Phase	Toner Bottle Drive Motor: M	CN3	1	
			13	Toner Bottle Drive Motor: Y: A Phase	Toner Bottle Drive Motor: Y	CN4	4	
			14	Toner Bottle Drive Motor: Y: XA Phase	Toner Bottle Drive Motor: Y	CN4	3	
			15	Toner Bottle Drive Motor: Y: B Phase	Toner Bottle Drive Motor: Y	CN4	2	
			16	Toner Bottle Drive Motor: Y: XB Phase	Toner Bottle Drive Motor: Y	CN4	1	

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
12	Image Processing IOB	CN200	1	PCU Motor: CMY: GAIN	Drum Motor: CMY	CN1	10	CN8, CN9, CN13: With relay connector
			2	PCU Motor: CMY: CLOCK			9	
			3	PCU Motor: CMY: BRK			8	
			4	PCU Motor: CMY: CW			7	
			5	PCU Motor: CMY: START			6	
			6	PCU Motor: CMY: LOCK			5	
			7	PCU Motor: CMY: GND			4	
			8	PCU Motor: CMY: GND			3	
			9	PCU Motor: CMY: +24VS1			2	
			10	PCU Motor: CMY: +24VS1			1	
			11	Development Motor: CMY: GAIN	Drum Motor: CMY	CN2	10	
			12	Development Motor: CMY: CLOCK			9	
			13	Development Motor: CMY: BRK			8	
			14	Development Motor: CMY: CW			7	
			15	Development Motor: CMY: START			6	
			16	Development Motor: CMY: LOCK			5	
			17	Development Motor: CMY: GND			4	
			18	Development Motor: CMY: GND			3	
			19	Development Motor: CMY: +24VS1			2	
			20	Development Motor: CMY: +24VS1			1	
			21	Development Solenoid/CTRL	Development Solenoid	CN8	2	
			22	Development Solenoid/CTRL			1	
			23	N.C.				
			24	N.C.				
			25	N.C.				
			26	N.C.				
			27	N.C.				
			28	N.C.				
			29	N.C.				
			30	N.C.				
			31	N.C.				
			32	N.C.				
			33	N.C.				
			34	N.C.				
			35	N.C.				
			36	N.C.				
			37	N.C.				
			38	N.C.				
			39	N.C.				
			40	N.C.				
12	Image Processing IOB	CN201	1	Transfer Drum Motor: Black: CTRL Method	Transfer Drum Motor: Black	CN7	15	CN8, CN9, CN13: With relay connector
			2	Transfer Drum Motor: Black: ITENC:			14	
			3	Transfer Drum Motor: Black: GAIN B			13	
			4	Transfer Drum Motor: Black: GAIN A			12	
			5	Transfer Drum Motor: Black: CLOCK			11	
			6	Transfer Drum Motor: Black: BRK			10	
			7	Transfer Drum Motor: Black: CW			9	
			8	Transfer Drum Motor: Black: START			8	
			9	Transfer Drum Motor: Black: LOCK			7	
			10	Transfer Drum Motor: Black: +5V			6	
			11	Transfer Drum Motor: Black: GND			5	
			12	Transfer Drum Motor: Black: GND			4	
			13	Transfer Drum Motor: Black: GND			3	
			14	Transfer Drum Motor: Black: +24VS1			2	
			15	Transfer Drum Motor: Black: +24VS1			1	
			16	N.C.				
			17	Waste toner capacity sensor: GND	Harness No.16 D1495330	CN5	3	
			18	Waste toner capacity sensor: Signal			2	
			19	Waste toner capacity sensor: +5V			1	
			20	Waste toner bottle set switch: GND	Waste toner bottle set switch	CN3	2	
21	Waste toner bottle set switch: Signal	1						
22	N.C.							
23	N.C.							
24	N.C.							
25	N.C.							
26	N.C.							
27	N.C.							
28	PTR Separation Sensor: GND	PTR Separation Sensor	CN11	3				
29	PTR Separation Sensor: Signal			2				
30	PTR Separation Sensor: +5V			1				
31	Paper Transfer Contact Motor: CTRL2	Paper Transfer Contact Motor	CN12	2				
32	Paper Transfer Contact Motor: CTRL1			1				

Harness No.	Connector (From)			Signal Information	Connector (To)			Note		
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.			
12	Image Processing IOB	CN204	1	PCU: Drum PCL/K/CTRL	Harness No.14 D1495328	CN13	16	CN8, CN9, CN13: With relay connector		
			2	PCU: +24VS2			15			
			3	PCU: HST_SCL			14			
			4	PCU: HST_SDA			13			
			5	PCU: HST_Sensor/K/PWM			12			
			6	PCU: HST_Sensor/+5V			11			
			7	PCU: HST_Sensor/K/FB			10			
			8	PCU: GND			9			
			9	PCU: Drum PCL/FC/CTRL			8			
			10	PCU: +24VS2			7			
			11	PCU: HST_SCL			6			
			12	PCU: HST_SDA			5			
			13	PCU: HST_Sensor/C/PWM			4			
			14	PCU: HST_Sensor/+5V			3			
			15	PCU: HST_Sensor/C/FB			2			
			16	PCU: GND			1			
			17	PCU: Drum PCL/FC/CTRL			32			
			18	PCU: +24VS2			31			
			19	PCU: HST_SCL			30			
			20	PCU: HST_SDA			29			
			21	PCU: HST_Sensor/M/PWM			28			
			22	PCU: HST_Sensor/+5V			27			
			23	PCU: HST_Sensor/M/FB			26			
			24	PCU: GND			25			
			25	PCU: Drum PCL/FC/CTRL			24			
			26	PCU: +24VS2			23			
			27	PCU: HST_SCL			22			
			28	PCU: HST_SDA			21			
			29	PCU: HST_Sensor/Y/PWM			20			
			30	PCU: HST_Sensor/+5V			19			
			31	PCU: HST_Sensor/Y/FB			18			
			32	PCU: GND			17			
12	Image Processing IOB	CN211	1	HVP CB: HVP/Development/DC/Y/PWM	HVP CB	CN800	11	CN8, CN9, CN13: With relay connector		
			2	HVP CB: HVP/Development/DC/M/PWM			10			
			3	HVP CB: HVP/Development/DC/C/PWM			9			
			4	HVP CB: HVP/Development/DC/K/PWM			8			
			5	HVP CB: HVP/Charge/DC/K/PWM			7			
			6	HVP CB: HVP/Charge/DC/C/PWM			6			
			7	HVP CB: HVP/Charge/DC/M/PWM			5			
			8	HVP CB: HVP/Charge/DC/Y/PWM			4			
			9	N.C.						
			10	N.C.						
			11	N.C.						
			12	N.C.						
			13	N.C.						
			14	HVP CB: HVP/Charge Development/SC Detection			3			
12	Image Processing IOB	CN216	1	N.C.	Controller Box Cooling Fan	CN9		CN8, CN9, CN13: With relay connector		
			2	N.C.						
			3	N.C.						
			4	N.C.						
			5	N.C.						
			6	Controller Box Cooling Fan: CTRL			3			
			7	Controller Box Cooling Fan: LOCK			2			
			8	Controller Box Cooling Fan: GND			1			
			9	Developing Air Intake Fan:Left/Toner supply cooling Fan: CTRL			Toner Supply Cooling Fan		CN10	3
			10	Toner Supply Cooling Fan: LOCK						2
			11	Toner Supply Cooling Fan: GND						1
			12	N.C.						
			13	N.C.						
			14	N.C.						
13										

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
14	Harness No.12 D1775326	CN1	1	PCU: Lubricant Near-End Sensor/K	Harness No.15 D1775329	CN2	16	CN2: With relay connector
			2	PCU: +24VS2			15	
			3	PCU: HST_SCL			14	
			4	PCU: HST_SDA			13	
			5	PCU: HST Sensor/K/PWM			12	
			6	PCU: HST Sensor/+5V			11	
			7	PCU: HST Sensor/K/FB			10	
			8	PCU: GND			9	
			9	PCU: Lubricant Near-End Sensor/C			8	
			10	PCU: +24VS2			7	
			11	PCU: HST_SCL			6	
			12	PCU: HST_SDA			5	
			13	PCU: HST Sensor/C/PWM			4	
			14	PCU: HST Sensor/+5V			3	
			15	PCU: HST Sensor/C/FB			2	
			16	PCU: GND			1	
			17	PCU: Lubricant Near-End Sensor/M			32	
			18	PCU: +24VS2			31	
			19	PCU: HST_SCL			30	
			20	PCU: HST_SDA			29	
			21	PCU: HST Sensor/M/PWM			28	
			22	PCU: HST Sensor/+5V			27	
			23	PCU: HST Sensor/M/FB			26	
			24	PCU: GND			25	
			25	PCU: Lubricant Near-End Sensor/Y			24	
			26	PCU: +24VS2			23	
			27	PCU: HST_SCL			22	
			28	PCU: HST_SDA			21	
			29	PCU: HST Sensor/Y/PWM			20	
			30	PCU: HST Sensor/+5V			19	
			31	PCU: HST Sensor/Y/FB			18	
			32	PCU: GND			17	
15	Harness No.14 D1495328	CN1	1	PCU: Drum PCL/K/CTRL	Quenching Lamp	CN9	2	CN2, CN3, CN4, CN5: With relay connector
			2	PCU: +24VS2	Harness No.59 D1473472	CN2	1	
				N.C.			8	
				N.C.			7	
			3	PCU: HST_SCL	Quenching Lamp	CN6	6	
			4	PCU: HST_SDA			5	
			5	PCU: HST Sensor/K/PWM			4	
			6	PCU: HST Sensor/+5V	Harness No.59 D1473472	CN3	3	
			7	PCU: HST Sensor/K/FB			2	
			8	PCU: GND			1	
			9	PCU: Drum PCL/FC/CTRL	Quenching Lamp	CN6	2	
			10	PCU: +24VS2	Quenching Lamp	CN7	1	
				N.C.			8	
				N.C.			7	
			11	PCU: HST_SCL	Harness No.59 D1473472	CN4	6	
			12	PCU: HST_SDA			5	
			13	PCU: HST Sensor/C/PWM			4	
			14	PCU: HST Sensor/+5V	Quenching Lamp	CN8	3	
			15	PCU: HST Sensor/C/FB			2	
			16	PCU: GND			1	
			17	PCU: Drum PCL/FC/CTRL	Quenching Lamp	CN8	2	
			18	PCU: +24VS2	Quenching Lamp	CN5	1	
				N.C.			8	
				N.C.			7	
			19	PCU: HST_SCL	Harness No.59 D1473472	CN4	6	
			20	PCU: HST_SDA			5	
			21	PCU: HST Sensor/M/PWM			4	
			22	PCU: HST Sensor/+5V	Quenching Lamp	CN8	3	
			23	PCU: HST Sensor/M/FB			2	
			24	PCU: GND			1	
			25	PCU: Drum PCL/FC/CTRL	Quenching Lamp	CN8	2	
			26	PCU: +24VS2	Quenching Lamp	CN5	1	
	N.C.	8						
	N.C.	7						
27	PCU: HST_SCL	Harness No.59 D1473472	CN5	6				
28	PCU: HST_SDA			5				
29	PCU: HST Sensor/Y/PWM			4				
30	PCU: HST Sensor/+5V	Quenching Lamp	CN8	3				
31	PCU: HST Sensor/Y/FB			2				
32	PCU: GND			1				

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
16	Harness No.12 D1775326	CN1	1	Waste toner capacity sensor: GND	Waste Toner Capacity Detection Sensor	CN2	3	CN1: With relay connector
			2	Waste toner capacity sensor: Waste Toner Capacity Detection Sensor			2	
			3	Waste toner capacity sensor: +5V			1	
17								
18	Harness No.10 D1495324	CN1	1	ITB Contact and Release Sensor: GND	ITB Contact and Release Sensor	CN2	3	
			2	ITB Contact and Release Sensor: Signal			2	
			3	ITB Contact and Release Sensor: +5V			1	
19	Harness No.10 D1495324	CN1	1	Toner end Sensor: GND	Toner end Sensor	CN2	3	CN2: With relay connector
			2	Toner end Sensor: Signal			2	
			3	Toner end Sensor: +5VTEK			1	
21	BCU	CN101	1	IPU: GND	IPU	CN575	22	
			2	IPU: 5V			21	
			3	IPU: GMAC1/GAVD Sync Serial TX Data			20	
			4	IPU: GMAC1/GAVD Sync Serial RX Data			19	
			5	IPU: GMAC1/GAVD Sync Serial CLOCK			18	
			6	IPU: N.C.			17	
			7	IPU: GMAC1/GAVD Sync Serial CS0			16	
			8	IPU: N.C.			15	
			9	IPU: GMAC2 Sync Serial TX Data			14	
			10	IPU: GMAC2 Sync Serial RX Data			13	
			11	IPU: Memory to plotter Reset Signal			12	
			12	IPU: Scanner to Memory Reset Signal			11	
			13	IPU: GMAC2 Sync Serial CLOCK			10	
			14	IPU: GMAC2 Sync Serial CS0			9	
			15	IPU: ADF TX Data			8	
			16	IPU: ADF RX Data			7	
			17	IPU: IPU Interruption			6	
			18	IPU: Engine OFF: Elapsed Time0			5	
			19	IPU: Engine OFF: Elapsed Time1			4	
			20	IPU: L: Normal Start/H: Awaiting Rapi Opening			3	
			21	IPU: Full Operation Mode Detection Signal			2	
			22	IPU: IPU Start Detection Signal			1	
22	Harness No.6 D1475308	CN1	1	ID Sensor: 3.3V	ID Sensor: FRONT	CN2	5	
			2	ID Sensor: GND			4	
			3	ID Sensor: FRONT LED Drive			3	
			4	ID Sensor: FRONT Diffuse Reflection Sensor			2	
			5	ID Sensor: FRONT Specular Reflection Sensor			1	
			6	ID Sensor: 3.3V	5			
			7	ID Sensor: GND	4			
			8	ID Sensor: CENTER LED Drive	3			
			9	ID Sensor: CENTER Diffuse Reflection Sensor	2			
			10	ID Sensor: CENTER Specular Reflection Sensor Output	1			
			11	ID Sensor: 3.3V	5			
			12	ID Sensor: GND	4			
			13	ID Sensor: REAR LED Drive	3			
			14	ID Sensor: REAR Diffuse Reflection Sensor	2			
			15	ID Sensor: REAR Specular Reflection Sensor	1			

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
23	Harness No.1 D1475340	CN1	A1	Set Detection: Reserved: TWN	Fusing Drawer	CN6	11	
			A2	Set Detection: Reserved: DOM			10	
			A3	Set Detection: EU			9	
			A4	Set Detection: NA			8	
			A5	Set Detection (C): GND			7	
			A6	Set Detection (P): GND			6	
				N.C.	5			
			A7	N.C.				
			A8	New unit Detection Fuse	4			
			A9	New unit Detection Fuse: GND	3			
				N.C.	2			
				N.C.	1			
			A10	Fusing Exit Sensor: GND	3			
			A11	Fusing Exit Sensor: Sensor Signal	2			
			A12	Fusing Exit Sensor: +5V	1			
				N.C.	4			
			A13	Thermopile (Edge): +5V	3			
			A14	Thermopile (Edge): GND	2			
			A15	Thermopile (Edge): FB	1			
				N.C.	4			
			A16	Thermopile (Center): +5V	3			
			A17	Thermopile (Center): GND	2			
			A18	Thermopile (Center): FB	1			
			B1	Fusing Shield Position Sensor 2: GND	3			
			B2	Fusing Shield Position Sensor 2: Sensor Signal	2			
			B3	Fusing Shield Position Sensor 2: +5V	1			
			B4	Fusing Shield Position Sensor 1: GND	3			
			B5	Fusing Shield Position Sensor 1: Sensor Signal	2			
			B6	Fusing Shield Position Sensor 1: +5V	1			
				N.C.	13			
			B7	Non-Contact Thermistor (Edge): Compensation :	12			
			B8	Non-Contact Thermistor (Edge): Detection: FB	11			
B9	Non-Contact Thermistor (Edge): GND	10						
B10	Non-Contact Thermistor (Center): Compensation :	9						
B11	Non-Contact Thermistor (Center): Detection: FB	8						
B12	Non-Contact Thermistor (Center): GND	7						
B13	Pressure Thermistor: Expanded End: FB	6						
B14	Pressure Thermistor: Expanded End: GND	5						
B15	Pressure Thermistor: End/2: FB	4						
B16	Pressure Thermistor: End/2: GND	3						
B17	Pressure Thermistor: Center: FB	2						
B18	Pressure Thermistor: Center: GND	1						
	1	Fusing Shield Drive Motor: XB Phase (B3)	4					
	2	Fusing Shield Drive Motor: B Phase (B1)	3					
	3	Fusing Shield Drive Motor: A Phase (A1)	2					
	4	Fusing Shield Drive Motor: XA Phase (A3)	1					
	Screw	T1	GND (1G)	1				
	PSU (AC)	CN985	HT1,2,4/L	4				
			HT1/N (Center)	6				
	PSU (AC)	CN986	HT2/N (Edge)	5				
			HT4/N	2				
			N.C.	3				
24	INLET	INLET	L AC IN L	PSU (AC)	T900			
			N AC IN N	PSU (AC)	T901			
			E EARTH	Screw	T1			
25	PSU (AC)	CN988	1 PSU (AC): AC L 5V 24V	PSU (DC)	CN901	1		
			2 PSU (AC): AC N 5V 24V			2		

Harness No.	Connector (From)			Signal Information	Connector (To)			Note	
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.		
26	PSU (AC)	CN989	1	PCU Anti-condensation Heater_L	PCU Anti-condensation Heater	CN1	1		
			2	Paper Feed Heater_L	Paper Feed Heater	CN2	1		
			3	Bank Heater_L	Bank Heater	CN3	1		
			4	PCU Anti-condensation Heater_N	PCU Anti-condensation Heater	CN1	2		
			5	Paper Feed Heater_N	Paper Feed Heater	CN2	2		
			6	Bank Heater_N	Bank Heater	CN3	2		
27	Harness No.1 D1475340	CN1	A1	Set Detection: Reserved: TWN	Fusing Drawer	CN6	11		
			A2	Set Detection: Reserved: DOM			10		
			A3	Set Detection: EU			9		
			A4	Set Detection: NA			8		
			A5	Set Detection (C): GND			7		
			A6	Set Detection (P): GND			6		
				N.C.	5				
			A7	N.C.					
			A8	New unit Detection Fuse	4				
			A9	New unit Detection Fuse: GND	3				
				N.C.	2				
				N.C.	1				
			A10	Fusing Exit Sensor: GND	3				
			A11	Fusing Exit Sensor: Sensor Signal	2				
			A12	Fusing Exit Sensor: +5V	1				
				N.C.	4				
			A13	Thermopile (Edge): +5V	3				
			A14	Thermopile (Edge): GND	2				
			A15	Thermopile (Edge): FB	1				
				N.C.	4				
			A16	Thermopile (Center): +5V	3				
			A17	Thermopile (Center): GND	2				
			A18	Thermopile (Center): FB	1				
			B1	Fusing Shield Position Sensor 2: GND	3				
			B2	Fusing Shield Position Sensor 2: Sensor Signal	2				
			B3	Fusing Shield Position Sensor 2: +5V	1				
			B4	Fusing Shield Position Sensor 1: GND	3				
			B5	Fusing Shield Position Sensor 1: Sensor Signal	2				
			B6	Fusing Shield Position Sensor 1: +5V	1				
				N.C.	13				
			B7	Non-Contact Thermistor (Edge): Compensation :	12				
			B8	Non-Contact Thermistor (Edge): Detection: FB	11				
B9	Non-Contact Thermistor (Edge): GND	10							
B10	Non-Contact Thermistor (Center): Compensation :	9							
B11	Non-Contact Thermistor (Center): Detection: FB	8							
B12	Non-Contact Thermistor (Center): GND	7							
B13	Pressure Thermistor: Expanded End: FB	6							
B14	Pressure Thermistor: Expanded End: GND	5							
B15	Pressure Thermistor: End/2: FB	4							
B16	Pressure Thermistor: End/2: GND	3							
B17	Pressure Thermistor: Center: FB	2							
B18	Pressure Thermistor: Center: GND	1							
	1	Fusing Shield Drive Motor: XB Phase (B3)	4						
	2	Fusing Shield Drive Motor: B Phase (B1)	3						
	3	Fusing Shield Drive Motor: A Phase (A1)	2						
	4	Fusing Shield Drive Motor: XA Phase (A3)	1						
	Screw	T1	GND (1G)	1					
	PSU (AC)	CN985	HT1,2,4/L	4					
			HT1/N (Center)	6					
	PSU (AC)	CN986	HT2/N (Edge)	5					
			HT4/N	2					
			N.C.	3					
			1	Fusing Exit Sensor: GND	Fusing Exit Sensor	CN2	3		
			2	Fusing Exit Sensor: Sensor Signal			2		
			3	Fusing Exit Sensor: +5V			1		
			4	N.C.			4		
			5	Thermopile (Edge): +5V	Thermopile (Edge)	CN3	3		
			6	Thermopile (Edge): GND			2		
			7	Thermopile (Edge): FB			1		
			8	N.C.			4		
			9	Thermopile (Center): +5V	Thermopile (Center)	CN4	3		
			10	Thermopile (Center): GND			2		
			11	Thermopile (Center): FB			1		
			12	N.C.			4		
			13	Fusing Shield Position Sensor 2: GND	Fusing Shield Position Sensor 2	CN9	3		
			14	Fusing Shield Position Sensor 2: Sensor Signal			2		
			15	Fusing Shield Position Sensor 2: +5V			1		
			16	Fusing Shield Position Sensor 1: GND	Fusing Shield Position Sensor 1	CN8	3		
			17	Fusing Shield Position Sensor 1: Sensor Signal			2		
			18	Fusing Shield Position Sensor 1: +5V			1		
			19	N.C.			13		
			20	Non-Contact Thermistor (Edge): Compensation :			12		
			21	Non-Contact Thermistor (Edge): Detection: FB			11		
			22	Non-Contact Thermistor (Edge): GND			10		
			23	Non-Contact Thermistor (Center): Compensation :			9		
			24	Non-Contact Thermistor (Center): Detection: FB			8		
			25	Non-Contact Thermistor (Center): GND			7		
			26	Pressure Thermistor: Expanded End: FB			6		
			27	Pressure Thermistor: Expanded End: GND			5		
			28	Pressure Thermistor: End/2: FB			4		
			29	Pressure Thermistor: End/2: GND			3		
			30	Pressure Thermistor: Center: FB			2		
			31	Pressure Thermistor: Center: GND			1		
			32	1	Fusing Shield Drive Motor: XB Phase (B3)	Fusing Shield Drive Motor	CN11	4	
			33	2	Fusing Shield Drive Motor: B Phase (B1)			3	
			34	3	Fusing Shield Drive Motor: A Phase (A1)			2	
			35	4	Fusing Shield Drive Motor: XA Phase (A3)			1	
			36	Screw	T1	GND (1G)	1		
			37	1	HT1,2,4/L		4		
			38	2	HT1/N (Center)		6		
			39	3	HT2/N (Edge)		5		
			40	4	HT4/N		2		
			41	N.C.			3		

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
28	Harness No.39 D1495392 (OP)	CN1	1	Paper Feed Heater_L	Paper Feed Heater	CN2	1	
			2	Paper Feed Heater_N			2	
29	PSU (AC)	CN990	1	Anti-condensation Heater SW_L	Anti-condensation	CN1	1	
			2	Anti-condensation Heater SW_N			1	
30	HVP: TTS	T1	T1	Image Transfer T1: Y	Image Transfer	T6		
			T2	Image Transfer T1: M			T7	
			T3	Image Transfer T1: C			T8	
			T4	Image Transfer T1: K			T9	
			T5	Paper Transfer T2			T10	
31	BCU	CN1	1	FFC Connection Detection	IPU	CN2	50	
			2	GND			49	
			3	IPU Addr. Path18			48	
			4	IPU Addr. Path17			47	
			5	IPU Addr. Path16			46	
			6	IPU Addr. Path15			45	
			7	IPU Addr. Path14			44	
			8	IPU Addr. Path13			43	
			9	IPU Addr. Path12			42	
			10	IPU Addr. Path11			41	
			11	IPU Addr. Path10			40	
			12	GND			39	
			13	IPU Addr. Path9			38	
			14	IPU Addr. Path8			37	
			15	IPU Addr. Path7			36	
			16	IPU Addr. Path6			35	
			17	IPU Addr. Path5			34	
			18	IPU Addr. Path4			33	
			19	IPU Addr. Path3			32	
			20	IPU Addr. Path2			31	
			21	IPU Addr. Path1			30	
			22	GND			29	
			23	IPU Data Path31			28	
			24	IPU Data Path30			27	
			25	IPU Data Path29			26	
			26	IPU Data Path28			25	
			27	IPU Data Path27			24	
			28	IPU Data Path26			23	
			29	IPU Data Path25			22	
			30	IPU Data Path24			21	
			31	GND			20	
			32	IPU Data Path23			19	
			33	IPU Data Path22			18	
			34	IPU Data Path21			17	
			35	IPU Data Path20			16	
			36	IPU Data Path19			15	
			37	IPU Data Path18			14	
			38	IPU Data Path17			13	
			39	IPU Data Path16			12	
			40	GND			11	
			41	Ander Chip Select			10	
			42	Patmos2 Chip Select			9	
			43	Patmos1 Chip Select			8	
			44	Breit Chip Select			7	
			45	ICIB Chip Select			6	
			46	IPU Write Signal			5	
			47	IPU Read Signal			4	
			48	IPU Read Write Signal (L: Write)			3	
			49	GND			2	
			50	FFC Connection Detection			1	

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
32	Image Processing IOB	CN1	1	FFC Connection Detection	Paper Transport IOB	CN2	40	
			2	Power On Reset			39	
			3	IOB Start Check			38	
			4	IOB Interruption			37	
			5	IOB Interruption			36	
			6	Addr. Path			35	
			7	Addr. Path			34	
			8	Addr. Path			33	
			9	Addr. Path			32	
			10	Addr. Path			31	
			11	Addr. Path			30	
			12	Addr. Path			29	
			13	Addr. Path			28	
			14	Addr. Path			27	
			15	Addr. Path			26	
			16	Addr. Path			25	
			17	Addr. Path			24	
			18	Addr. Path			23	
			19	Addr. Path			22	
			20	Addr. Path			21	
			21	Addr. Path			20	
			22	Addr. Path			19	
			23	Addr. Path			18	
			24	Addr. Path			17	
			25	Addr. Path			16	
			26	GND			15	
			27	Data Path			14	
			28	Data Path			13	
			29	Data Path			12	
			30	Data Path			11	
			31	Data Path			10	
			32	Data Path			9	
			33	Data Path			8	
			34	Data Path			7	
			35	GND			6	
			36	IOB Chip Cell			5	
			37	IOB Chip Cell			4	
			38	IOB Read			3	
			39	IOB Write			2	
			40	FFC Connection Detection			1	

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
33	BCU	CN1	1	FFC Connection Detection	Image Processing IOB	CN2	50	
			2	IOB Write Strobe Signal			49	
			3	IOB Read Signal			48	
			4	GND			47	
			5	IOB1 Chip Select			46	
			6	IOB2 Chip Select			45	
			7	IOB3 Chip Select			44	
			8	GND			43	
			9	IOB Data24			42	
			10	IOB Data25			41	
			11	IOB Data26			40	
			12	IOB Data27			39	
			13	IOB Data28			38	
			14	IOB Data29			37	
			15	IOB Data30			36	
			16	IOB Data31			35	
			17	GND			34	
			18	IOB Addr.0			33	
			19	IOB Addr.1			32	
			20	IOB Addr.2			31	
			21	IOB Addr.3			30	
			22	IOB Addr.4			29	
			23	IOB Addr.5			28	
			24	IOB Addr.6			27	
			25	IOB Addr.7			26	
			26	GND			25	
			27	IOB Addr.8			24	
			28	IOB Addr.9			23	
			29	IOB Addr.10			22	
			30	IOB Addr.11			21	
			31	IOB Addr.12			20	
			32	IOB Addr.13			19	
			33	IOB Addr.14			18	
			34	IOB Addr.15			17	
			35	IOB Addr.16			16	
			36	IOB Addr.17			15	
			37	IOB Addr.18			14	
			38	IOB Addr.19			13	
			39	GND			12	
			40	IOB1 Interruption			11	
			41	IOB2 Interruption			10	
			42	IOB3 Interruption			9	
			43	IOB Start Detection Signal			8	
			44	Power On Reset Signal			7	
			45	GND			6	
			46	HST Sensor SCL Signal			5	
			47	HST Sensor SDA Signal			4	
			48	ID-TAG SCL Signal			3	
			49	ID-TAG SDA Signal			2	
			50	FFC Connection Detection			1	
51	Harness No.1 D14755340	CN1	1	Registration Sensor: GND	Registration Sensor	CN2	3	CN1: With relay connector
			2	Registration Sensor: Sensor Signal			2	
			3	Registration Sensor: +5V			1	

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
52	Harness No.1 D14755340 Harness No.5 D14955307	CN1	1	Pick-up Solenoid: Terminal1 (+24VS2)	Paper Feed Pick-up Solenoid	CN6	2	CN6: With relay connector
			2	Pick-up Solenoid: Terminal2 (PWM)			1	
			3	N.C.				
			4	N.C.				
			5	N.C.	1			
			6	Transport Sensor: GND	3			
			7	Transport Sensor: Sensor Signal	2			
			8	Transport Sensor: +5V	1			
			9	Paper End Sensor: GND	3			
			10	Paper End Sensor: Sensor Signal	2			
			11	Paper End Sensor: +5V	1			
			12	Limit Sensor: GND	3			
			13	Limit Sensor: Sensor Signal	2			
			14	Limit Sensor: +5V	1			
53	Harness No.1 D14755340	CN1	1	Fusing Entrance Sensor: GND	Fusing Entrance Sensor	CN2	3	CN1: With relay connector
			2	Fusing Entrance Sensor: Sensor Signal			2	
			3	Fusing Entrance Sensor: +5V			1	
54	Harness No.1 D14755340	CN1	1	By-pass/Duplex Motor: ENC: A Phase	By-pass/Duplex Motor	CN3	8	CN4: With relay connector
			2	By-pass/Duplex Motor: ENC: B Phase			7	
			3	By-pass/Duplex Motor: +5V			6	
			4	By-pass/Duplex Motor: CW/CCW (Low)			5	
			5	By-pass/Duplex Motor: PWM			4	
			6	By-pass/Duplex Motor: BRK (Low)			3	
			7	By-pass/Duplex Motor: GND			2	
			8	By-pass/Duplex Motor: +24VS2			1	
			9	Duplex Entrance Sensor: GND	5			
			10	Duplex Entrance Sensor: Sensor Signal	4			
			11	Duplex Entrance Sensor: +5V	3			
			12	Duplex Exit Sensor: GND	3			
			13	Duplex Exit Sensor: Sensor Signal	2			
			14	Duplex Exit Sensor: +5V	1			
			15	Duplex Unit Open/Close Sensor: SW Terminal2	2			
			16	Duplex Unit Open/Close Sensor: SW Terminal1	1			
			17	Duplex Unit Open/Close LED: CTRL	2			
			18	Duplex Unit Open/Close LED: +5V	1			
55	Harness No.1 D14755340	CN1	1	By-pass Pick-up Solenoid: Terminal 2 (PWM)	Harness No.64 D1492659	CN2	5	
			2	By-pass Pick-up Solenoid: Terminal 1 (+24VS2)			4	
			3	By-pass Paper End Sensor: GND			3	
			4	By-pass Paper End Sensor: Sensor Signal			2	
			5	By-pass Paper End Sensor: +5V	1			
			6	By-pass Paper Length Sensor: SW Terminal3	9			
			7	By-pass Paper Length Sensor: SW Terminal5	8			
			8	By-pass Paper Length Sensor: SW Terminal4	7			
			9	By-pass Paper Length Sensor: COM Terminal	6			
			10	By-pass Paper Length Sensor: SW Terminal1	5			
			11	By-pass Paper Length Sensor: SW Terminal2	4			
			12	By-pass Paper Size Sensor: GND	3			
			13	By-pass Paper Size Sensor: Sensor Signal	2			
			14	By-pass Paper Size Sensor: +5V	1			

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note	
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.		
56									
57	Harness No.1 D14755340	CN1	1	Paper Exit Solenoid: Terminal1 (+24VS2)	Exit Junction Solenoid	CN2	2	CN2, CN3: With relay connector	
			2	Paper Exit Solenoid: Terminal2 (PWM)			1		
			3	Inversion Sensor: GND			3		
			4	Inversion Sensor: Sensor Signal	Inversion Sensor	CN4	2		
			5	Inversion Sensor: +5V			1		
			6	Paper Exit Sensor: GND	Exit Sensor	CN5	3		
			7	Paper Exit Sensor: Sensor Signal			2		
			8	Paper Exit Sensor: +5V			1		
			9	N.C.					
			10	N.C.					
			11	N.C.					
			12	c: XB Phase			4		
			13	Inversion Motor: B Phase	Inversion Motor	CN3	3		
			14	Inversion Motor: XA Phase			2		
			15	Inversion Motor: A Phase			1		

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
58	SIO	CN310	1	PSU: PGND	Harness No.2 D1775301	CN1	1	
			2	PSU: PGND_ADF			2	
			3	PSU: +24V_ADF			3	
			4	PSU: +24V			4	
59	Harness No.12 D1775326	CN1	1	N.C.	HST Sensor	CN2	1	pin 1and 2: Short-circuited for disconnection of connectors
			2	N.C.			2	
			3	PCU: HST_SCL			3	
			4	PCU: HST_SDA			4	
			5	PCU: HST_Sensor/C/PWM			5	
			6	PCU: HST_Sensor/+5V			6	
			7	PCU: HST_Sensor/C/FB				
			8	PCU: GND				
60	Harness No.23 D1495341	CN1	1	GND (1G)	Screw	T1		
			2	N.C.				
			3	N.C.				
			4	HT1,2,4/L	Screw	T4		
			5	HT2/N (Edge)	Heating Roller: End	CN9	1	
			6	HT1/N (Center)	Heating Roller: Center		2	
		1	Pressure Thermistor:Center: GND	Pressure Thermistor:	CN4	2		
		2	Pressure Thermistor:Center: FB	Thermistor:		1		
		3	Pressure Thermistor:End: GND	Pressure		4		
		4	Pressure Thermistor:End: FB	Thermistor:	CN5	3		
		5	Pressure Thermistor:Expanded End: GND	Pressure		2		
		6	Pressure Thermistor:Expanded End: FB	Thermistor:	1			
		7	Non-Contact Thermistor (Center): GND	Non-Contact Thermistor1	CN6	1		
		8	Non-Contact Thermistor (Center): Detection: FB			2		
		9	Non-Contact Thermistor (Center): Compensation :			3		
		10	Non-Contact Thermistor (Edge): GND	Non-Contact Thermistor2	CN7	1		
		11	Non-Contact Thermistor (Edge): Detection: FB			2		
		12	Non-Contact Thermistor (Edge): Compensation :			3		
		13	N.C.					
		1	N.C.					
		2	N.C.					
		3	New unit Detection Fuse: GND	New unit	CN8	2		
4	New unit Detection Fuse	Detection Fuse	1					
5	N.C.							
6	Set Detection (P): GND	Set Detection: 100V Model (Short-Circuit)	CN3	8				
7	Set Detection: GND							
9	Set Detection: 200V Model							
10	Set Detection: Reserved: 1							
11	Set Detection: Reserved: 2							

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
61	Harness No.23 D1495341	CN1	1	GND (1G)	Screw	T1		CN4, CN5, CN6, CN7, CN8: With relay connector
			2	N.C.				
			3	N.C.				
			4	HT1,2,4/L	Screw	T4		
			5	HT2/N (Edge)	Heating Roller: End	CN9	1	
			6	HT1/N (Center)	Heating Roller: Center		2	
		CN2	1	Pressure Thermistor:Center: GND	Pressure Thermistor:	CN4	2	
			2	Pressure Thermistor:Center: FB	Thermistor:		1	
			3	Pressure Thermistor:End: GND	Pressure Thermistor:		4	
			4	Pressure Thermistor:End: FB	Thermistor:	CN5	3	
			5	Pressure Thermistor:Expanded End: GND	Pressure Thermistor:		2	
			6	Pressure Thermistor:Expanded End: FB	Thermistor:		1	
			7	Non-Contact Thermistor (Center): GND	Non-Contact Thermistor1	CN6	1	
			8	Non-Contact Thermistor (Center): Detection: FB	Thermistor1		2	
			9	Non-Contact Thermistor (Center): Compensation:			3	
			10	Non-Contact Thermistor (Edge): GND	Non-Contact Thermistor2	CN7	1	
			11	Non-Contact Thermistor (Edge): Detection: FB	Thermistor2		2	
			12	Non-Contact Thermistor (Edge): Compensation:			3	
		CN3	13	N.C.				
			1	N.C.				
2	N.C.							
3	New unit Detection Fuse: GND		New unit Detection Fuse	CN8	2			
4	New unit Detection Fuse				1			
5	N.C.							
6	Set Detection (P): GND							
7	Set Detection: GND		Set Detection: 100V Model (Short-Circuit)	CN3	8			
9	Set Detection: 200V Model							
10	Set Detection: Reserved: 1							
11	Set Detection: Reserved: 2							
62	Harness No.27 D1495342	CN1	1	GND (1G)	Screw	T1	CN4, CN5, CN6, CN7, CN8: With relay connector	
			2	N.C.				
			3	N.C.				
			4	HT1,2,4/L	Screw	T4		
			5	HT2/N (Edge)	Heating Roller: End	CN9		1
			6	HT1/N (Center)	Heating Roller: Center			2
		CN2	1	Pressure Thermistor:Center: GND	Pressure Thermistor:	CN4		2
			2	Pressure Thermistor:Center: FB	Thermistor:			1
			3	Pressure Thermistor:End: GND	Pressure Thermistor:			4
			4	Pressure Thermistor:End: FB	Thermistor:	CN5		3
			5	Pressure Thermistor:Expanded End: GND	Pressure Thermistor:			2
			6	Pressure Thermistor:Expanded End: FB	Thermistor:			1
			7	Non-Contact Thermistor (Center): GND	Non-Contact Thermistor1	CN6		1
			8	Non-Contact Thermistor (Center): Detection: FB	Thermistor1			2
			9	Non-Contact Thermistor (Center): Compensation :				3
			10	Non-Contact Thermistor (Edge): GND	Non-Contact Thermistor2	CN7		1
			11	Non-Contact Thermistor (Edge): Detection: FB	Thermistor2			2
			12	Non-Contact Thermistor (Edge): Compensation :				3
		CN3	13	N.C.				
			1	N.C.				
2	N.C.							
3	New unit Detection Fuse: GND		New unit Detection Fuse	CN8	2			
4	New unit Detection Fuse				1			
5	N.C.							
6	Set Detection (P): GND							
7	Set Detection: GND		Set Detection: 200V Model (Short-Circuit)	CN3	9			
8	Set Detection: 100V Model							
10	Set Detection: Reserved: 1							
11	Set Detection: Reserved: 2							

Harness No.	Connector (From)			Signal Information	Connector (To)			Note	
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.		
63	Harness No.54 D1494696	CN1	1	Duplex Entrance Sensor: GND	Duplex Entrance Sensor	CN2	3		
			2	Duplex Entrance Sensor: Sensor Signal			2		
			3	Duplex Entrance Sensor: +5V			1		
			4	N.C.					
			5	N.C.					
64	Harness No.55 D1492666	CN1	1	By-pass Pick-up Solenoid: Terminal2 (PWM)	By-pass Pick-up Solenoid	CN2	3	CN1: With relay connector	
			2	N.C.			2		
			3	By-pass Pick-up Solenoid: Terminal1 (+24VS2)			1		
			4	By-pass Paper End Sensor: GND			3		
			5	By-pass Paper End Sensor: Sensor Signal			2		
65	Harness No.55 D1492661	CN1	1	By-pass Paper Length Sensor: SW Terminal3	By-pass Paper End Sensor	CN3	3	CN1: With relay connector	
			2	By-pass Paper Length Sensor: SW Terminal5			1		
			3	By-pass Paper Length Sensor: SW Terminal4			2		
			4	N.C.			1		
			5	N.C.			1		
		CN1	4	By-pass Paper Length Sensor: COM Terminal			CN2		7
			5	By-pass Paper Length Sensor: SW Terminal1					6
			6	By-pass Paper Length Sensor: SW Terminal2					5
			7	By-pass Paper Size Sensor: GND					4
			8	By-pass Paper Size Sensor: Sensor Signal					3
CN3	8	By-pass Paper Size Sensor: Sensor Signal	CN3	2					
	9	By-pass Paper Size Sensor: +5V		1					
66									
67									
68									
69									
70	SIO	CN318	1	DGND	HPS	CN1	3		
			2	HPS			2		
			3	+5.9V			1		
			4	DGND			3		
			5	AKS			2		
			6	5VE_AKS			1		
71	SIO	CN314	6	BB (SIO)	Scanner Motor	CN1	1		
			5	+24VA			2		
			4	B (SIO)			3		
			3	A (SIO)			4		
			2	+24VA			5		
			1	AB (SIO)			6		

D176/D177 Harness Pin Assignment

Harness No.	Connector (From)			Signal Information	Connector (To)			Note
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.	
72	SIO	CN311	15	HPS_N	IPU	CN579	1	
			14	SMD_VR3			2	
			13	SMD_VR2			3	
			12	SMD_VR1			4	
			11	SMD_RST			5	
			10	SMD_DIR			6	
			9	SMD_CLK_N			7	
			8	SMD_M2			8	
			7	SMD_M1			9	
			6	SMD_SYNC			10	
			5	5V_ADF			11	
			4	DFGATE_N			12	
			3	ADF_TXD			13	
			2	ADF_RXD			14	
			1	ADF_POW_ON_N			15	
			30	5VE_AKS			16	
			29	AKS			17	
			28	5VE_DOC			18	
			27	DOCSET_N			19	
			26	APS1_N			20	
			25	APS2_N			21	
			24	APS3_N			22	
			23	APS4_N			23	
			22	APS5_N			24	
			21	APS_ON_N			25	
			20	DGND			26	
			19	LED_ON_N			27	
			18	LED_ERR			28	
			17	DGND			29	
			16	SCN_POW_ON_N			30	
73	SIO	CN313	1	DGND	APS2 (Length Detection)	CN2	3	
			2	APS2			2	
			3	+3.4VAPS			1	
			4	DGND			3	
			5	APS1			2	
			6	+3.4VAPS			1	
	SIO	CN315	1	LED_PWM	SBU	CN301	13	
			2	DGND			12	
			3	DGND			11	
			4	+3.3V			10	
			5	+3.3V			9	
			6	+3.3V			8	
			7	DGND			7	
8	DGND	6						
9	+5.9V	5						
10	+5.9V	4						
11	DGND	3						
12	+10V	2						
13	DGND	1						

Harness No.	Connector (From)			Signal Information	Connector (To)			Note						
	To Connector	Addr.	Pin No.		To Connector	Addr.	Pin No.							
74	Harness No.76 D1475237	CN13	11	Y: Sync GND	Sync Detection Y	CN1	1							
			10	Y: Sync VCC			2							
			9	Y: Sync Signal			3							
			Harness No.76 D1475237	CN220	8	K: Sync GND	Sync Detection K	CN2	1					
					7	K: Sync VCC			2					
					6	K: Sync Signal			3					
					Harness No.76 D1475237	CN220	5	Polygon Mirror Motor CLOCK	Polygon Mirror Motor	CN3	1			
							4	Polygon Mirror Motor READY			2			
							3	Polygon Mirror Motor ON			3			
							2	Polygon Mirror Motor GND			4			
							1	Polygon Mirror Motor DV24V			5			
							Harness No.76 D1475237	CN220	15	Skew Motor: C: A Phase	C Skew Motor	CN6	1	
									14	Skew Motor: C: B Phase			2	
									13	+24V			3	
									Harness No.76 D1475237	CN220	12	Skew Motor: C: /B Phase	M Skew Motor	CN5
	11	Skew Motor: C: /A Phase									5			
	10	Skew Motor: M: A Phase									1			
	9	Skew Motor: M: B Phase									2			
	8	+24V	3											
	Harness No.76 D1475237	CN220	7	Skew Motor: M: /B Phase							Y Skew Motor	CN4	4	
			6	Skew Motor: M: /A Phase									5	
			5	Skew Motor: Y: A Phase	1									
			4	Skew Motor: Y: B Phase	2									
			3	+24V	3									
			Harness No.76 D1495237	CN11	2	Skew Motor: Y: /B Phase					LDB/KC	CN1	4	
					1	Skew Motor: Y: /A Phase							5	
					16	DATA_C	1							
					15	DATA_C_N	2							
					14	DROPEN_KC	3							
					Harness No.76 D1495237	CN11	13	ERR_KC_N	LDB/YM	CN2	4			
12							5VS	5						
11							5VS	6						
10							GND	7						
9							DATA_K_N	8						
Harness No.76 D1495237	CN11	8					DATA_K	LDB/YM	CN2	9				
		7					APC_KC_N			10				
		6					SYCS_KC_N			11				
		5					SYCLK_KC			12				
		4					SYDI_KC			13				
		Harness No.76 D1495237	CN11	3			SYDO_KC	LDB/YM	CN2	14				
				2			GND			15				
				1			N.C.							
				32			DATA_M_N			1				
				31			DATA_M			2				
				Harness No.76 D1495237	CN11	30	ERR_YM_N	LDB/YM	CN2	3				
						29	5VS			4				
						28	5VS			5				
						27	GND			6				
						26	DATA_Y			7				
Harness No.76 D1495237	CN11					25	DATA_Y_N	LDB/YM	CN2	8				
						24	APC_YM_N			9				
						23	SYCS_YM_N			10				
						22	SYCLK_YM			11				
						21	SYDI_YM			12				
		Harness No.76 D1495237	CN11			20	SYDO_YM	LDB/YM	CN2	13				
						19	GND			14				
						18	N.C.							
						17	N.C.							

D176/D177 ELECTRICAL COMPONENT LAYOUT

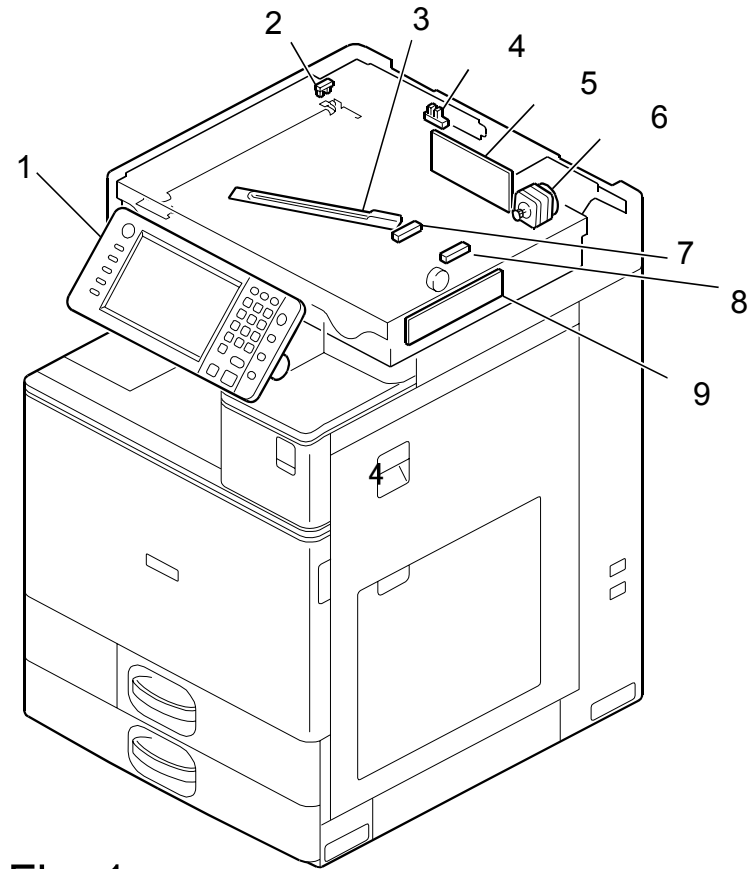


Fig. 1

d177f4540

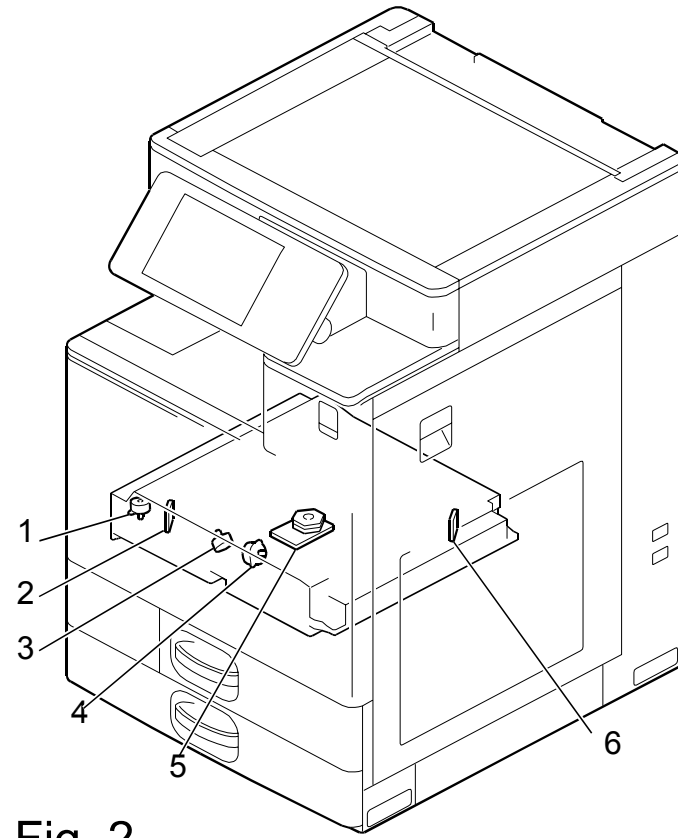


Fig. 2

d 1500914

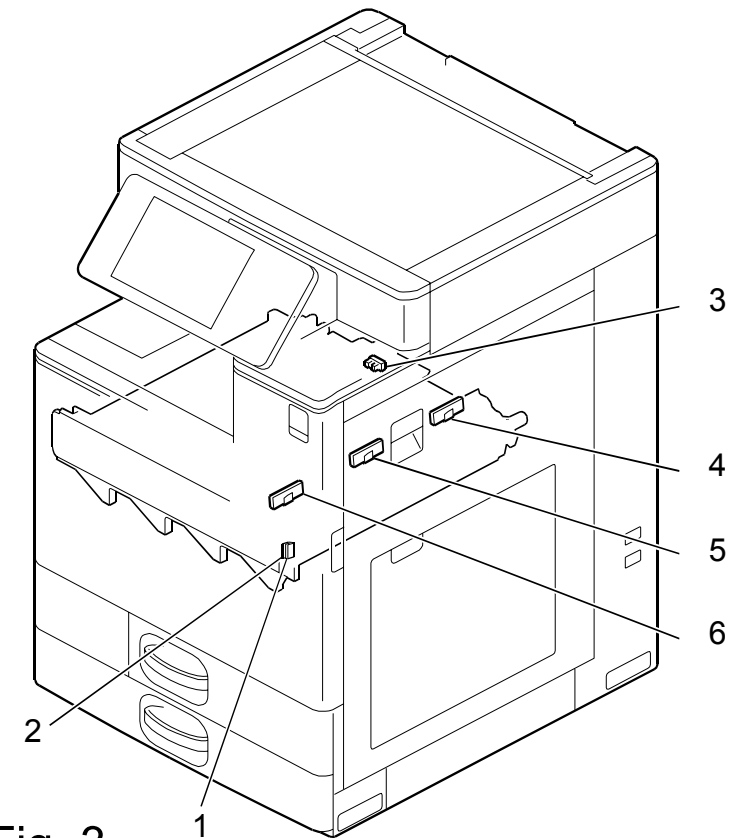


Fig. 3

d 1500913

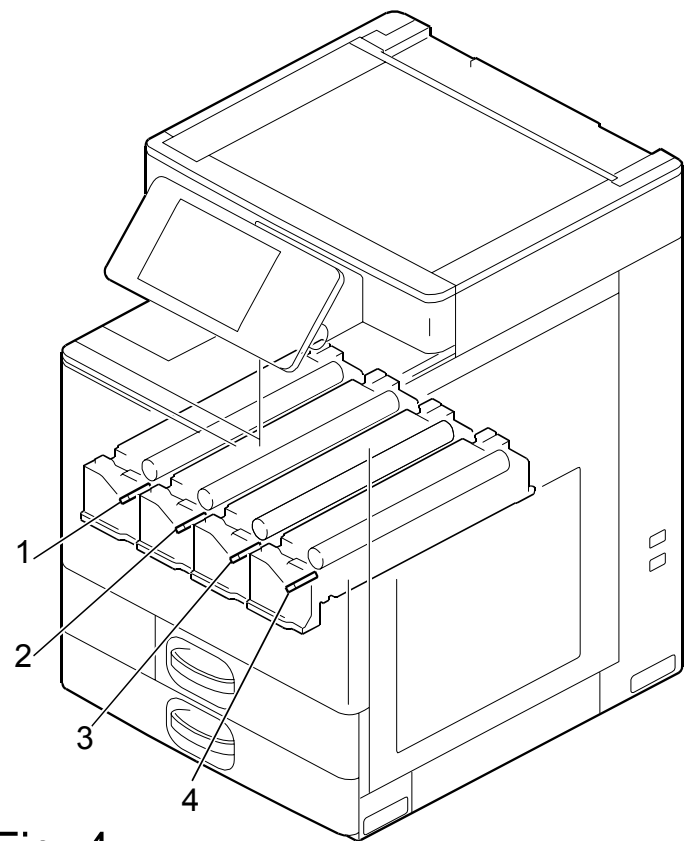


Fig. 4

d1500915

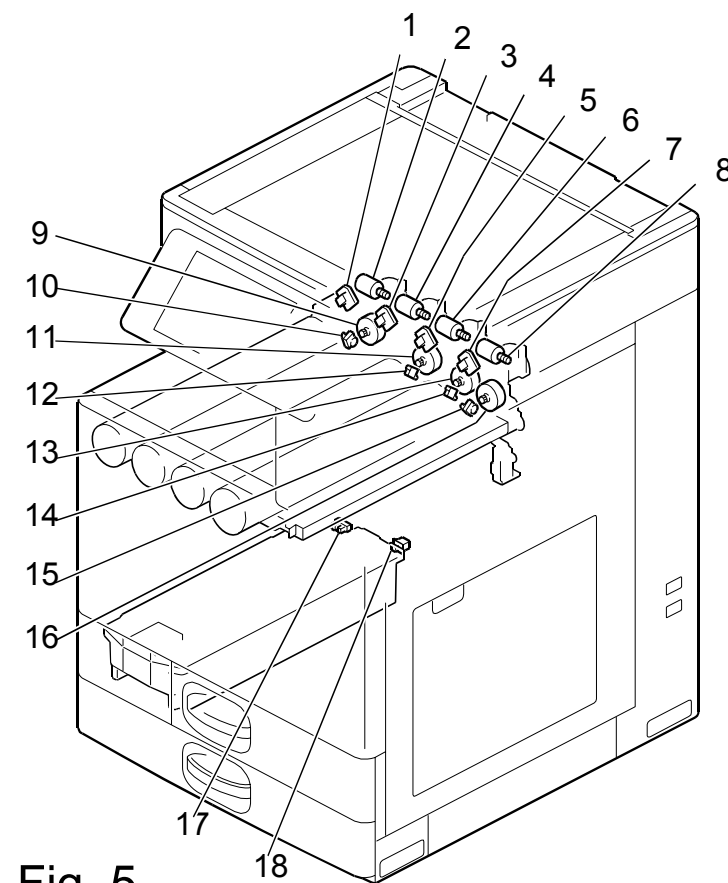


Fig. 5

d 1500919

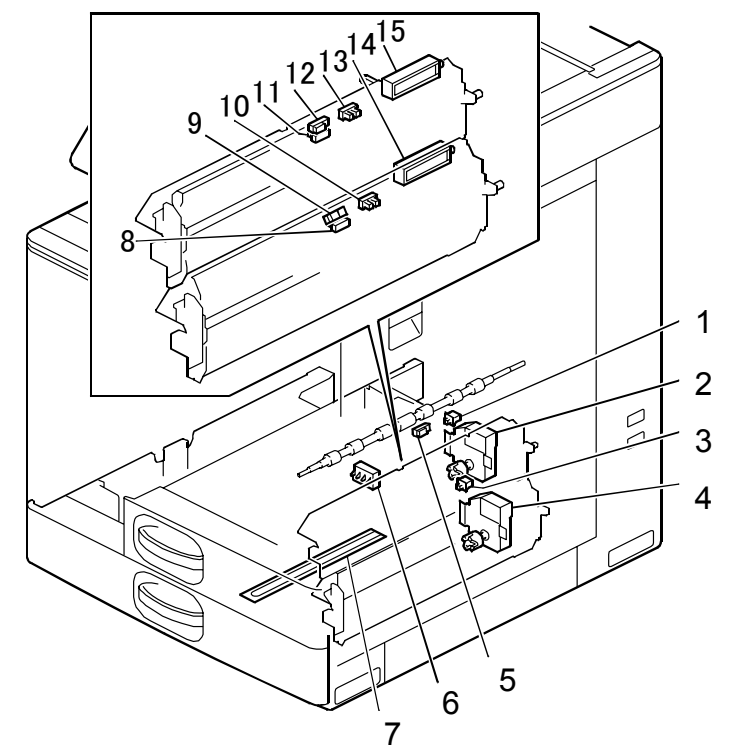


Fig. 6

d177z4506

D176/D177 ELECTRICAL COMPONENT LAYOUT

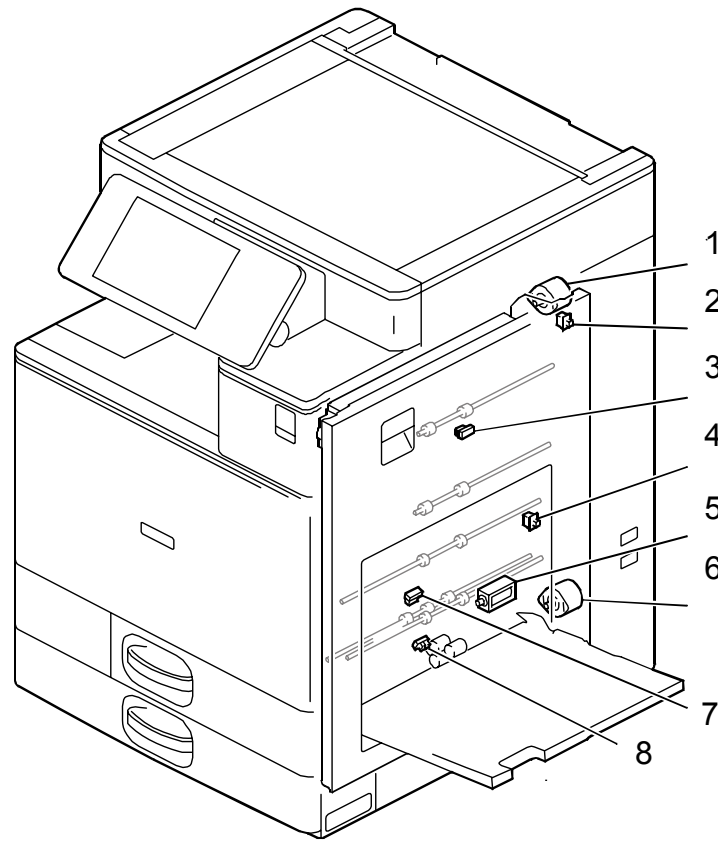


Fig. 7

d177z4507

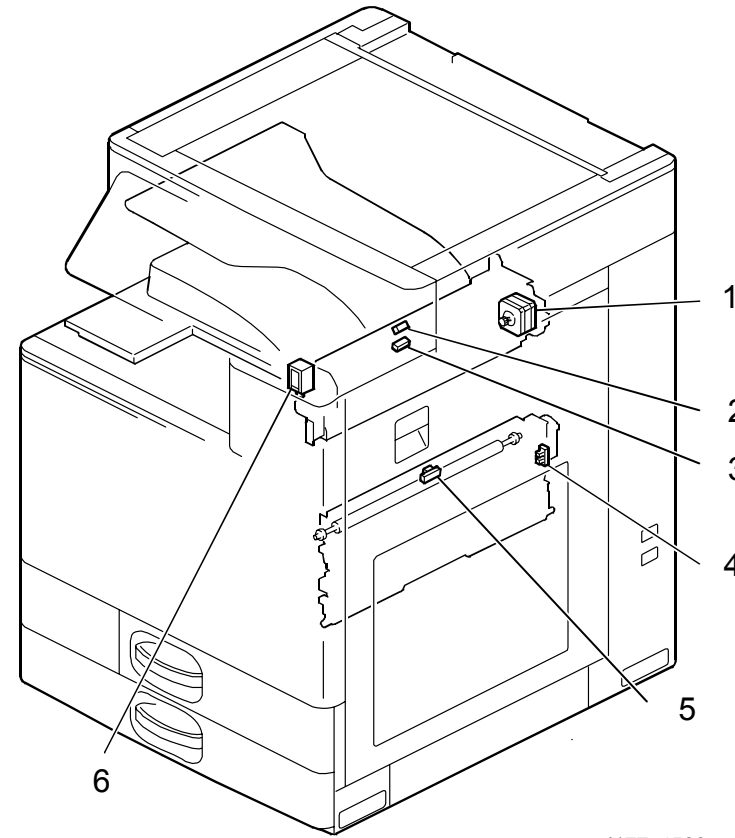


Fig. 8

d177z4509

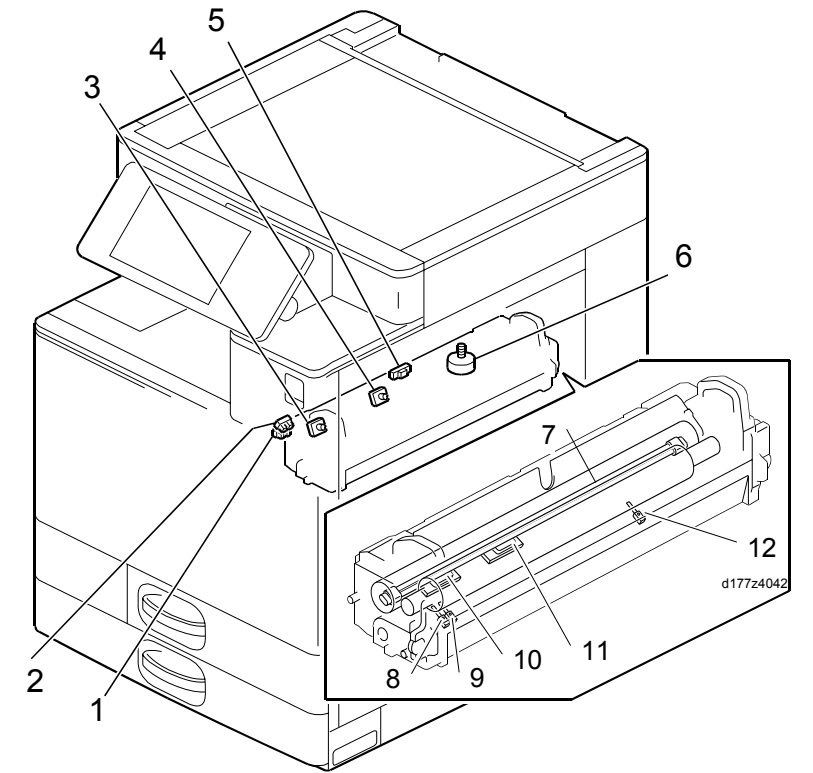


Fig. 9

d1500916

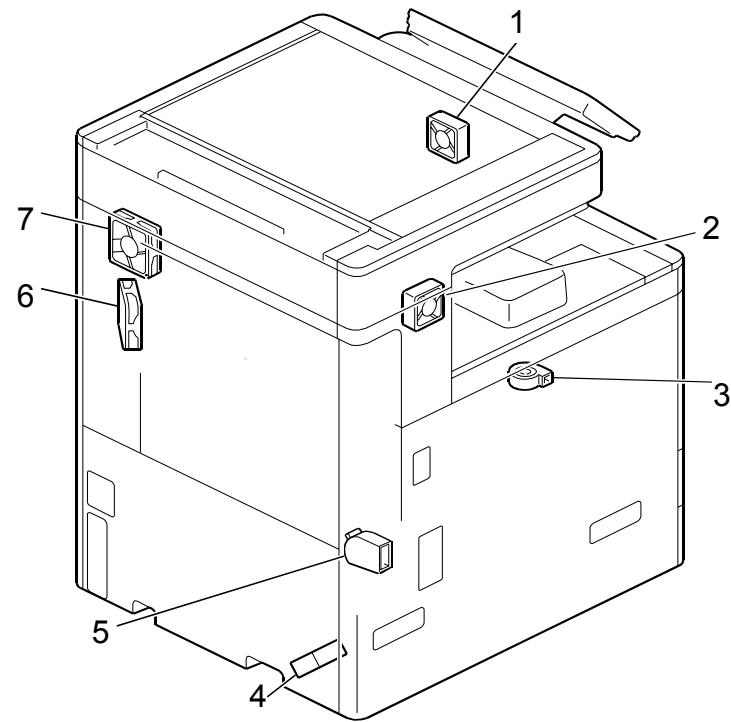


Fig. 10

d176f2043

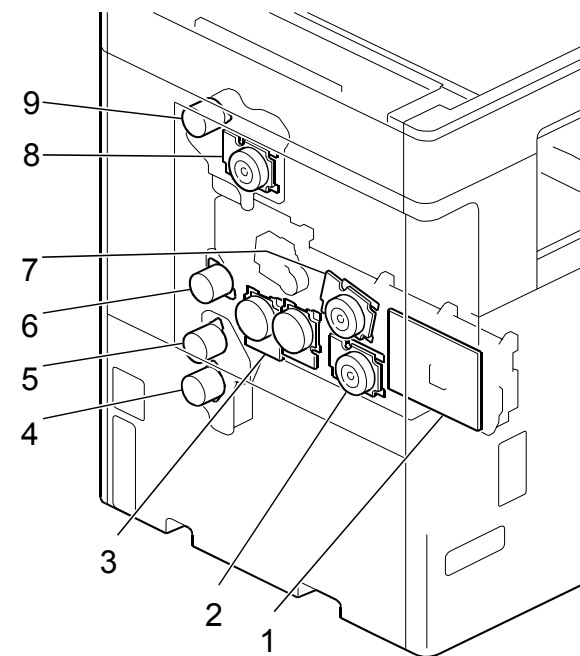


Fig. 11

d1500923

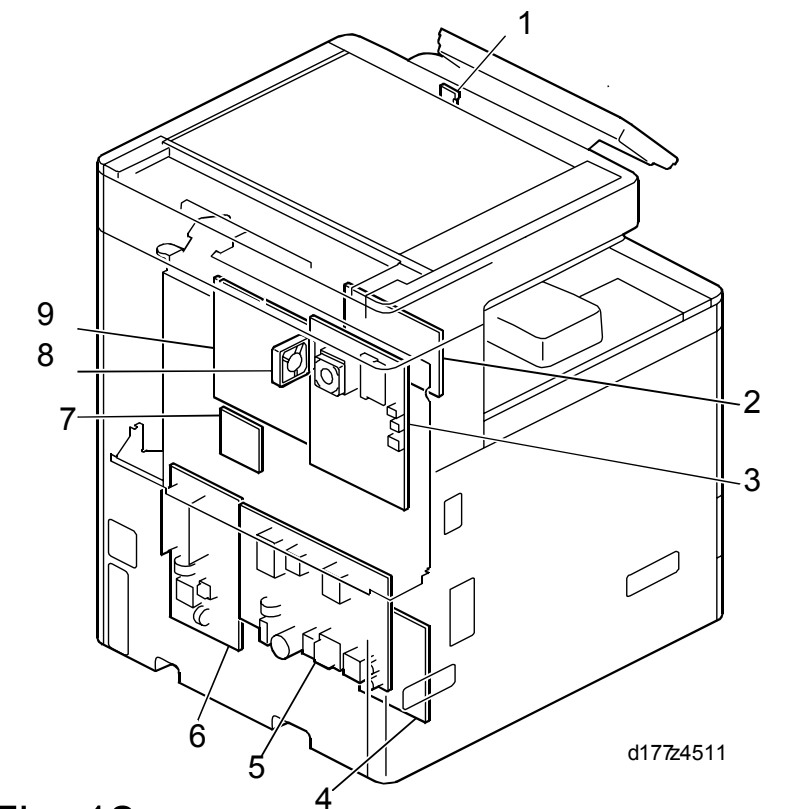


Fig. 12

d177z4511

D176/D177 ELECTRICAL COMPONENT LAYOUT

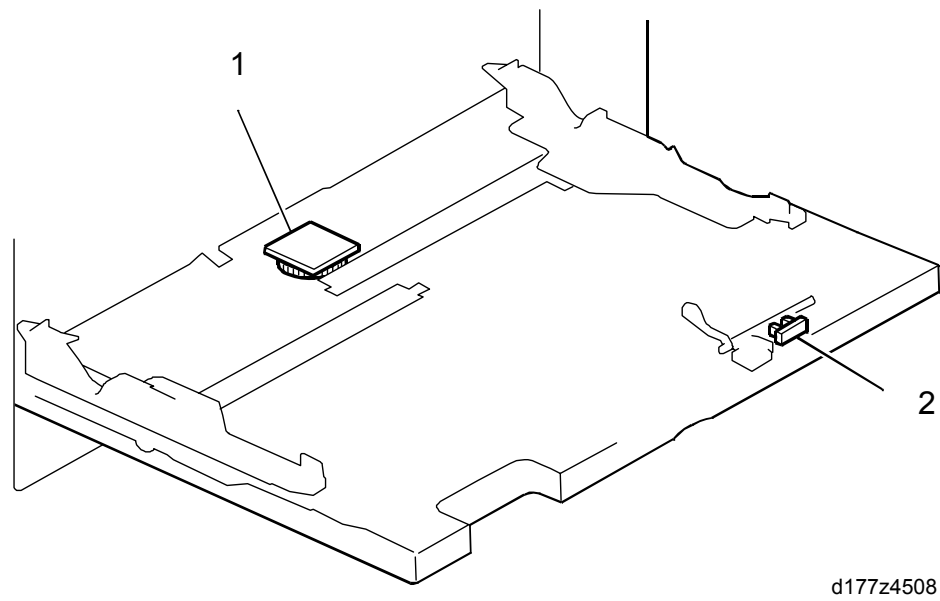


Fig. 13

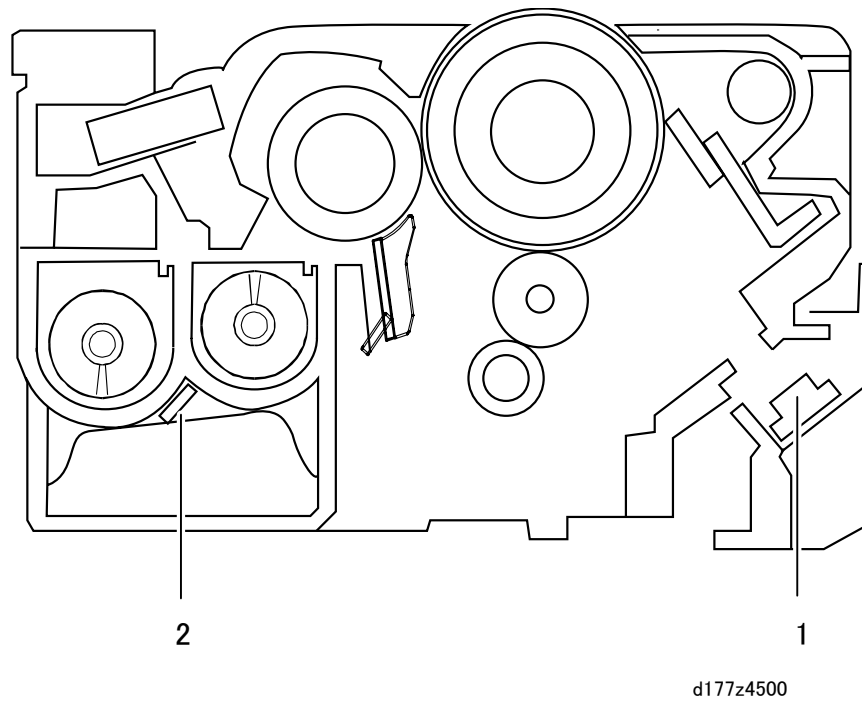


Fig. 14

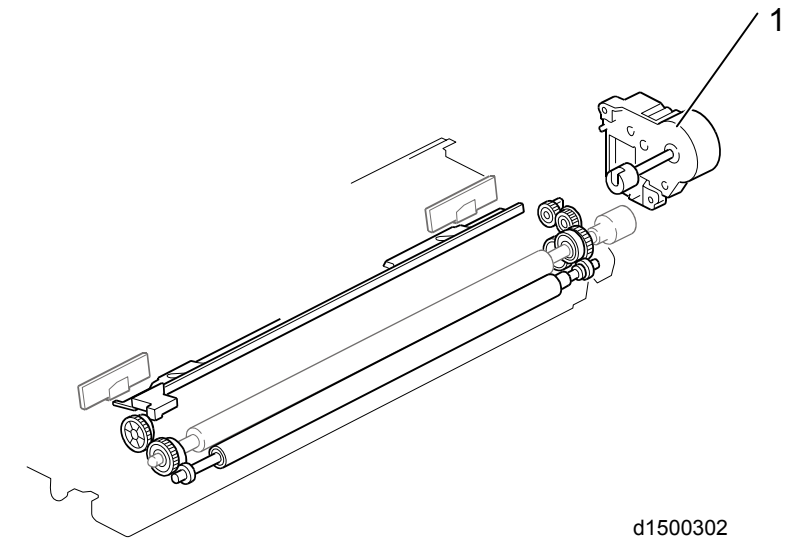


Fig. 15

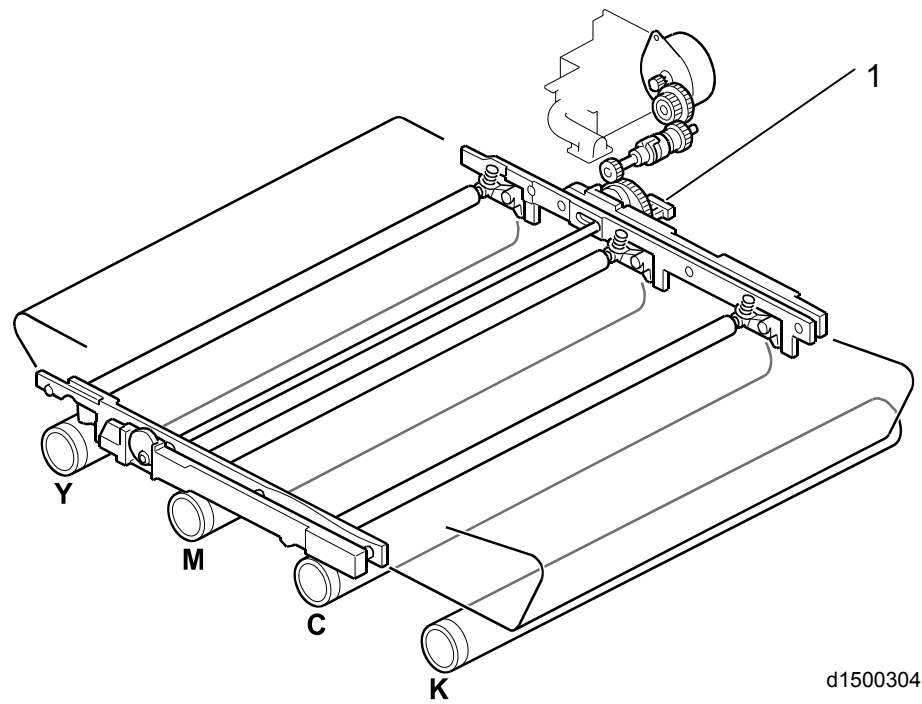


Fig. 16

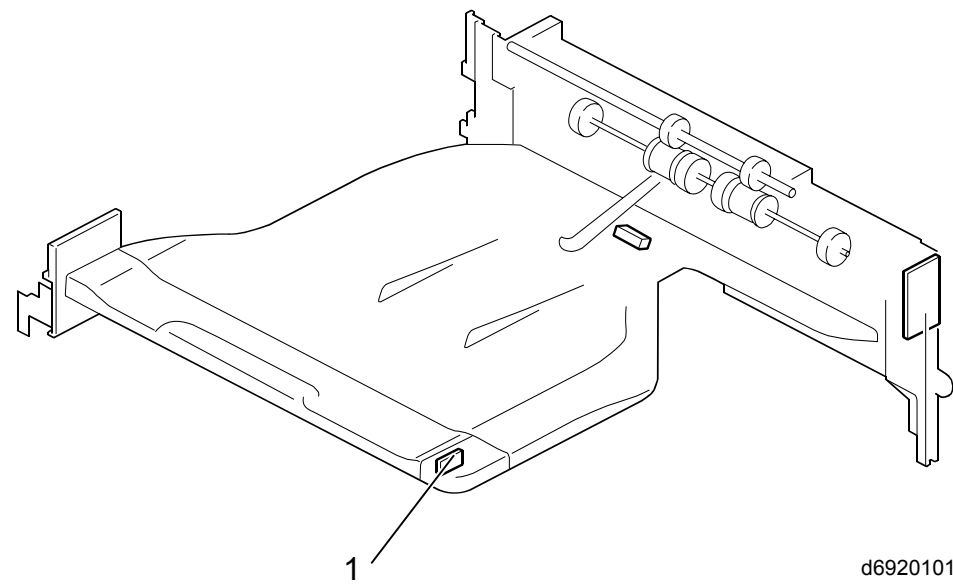


Fig. 17

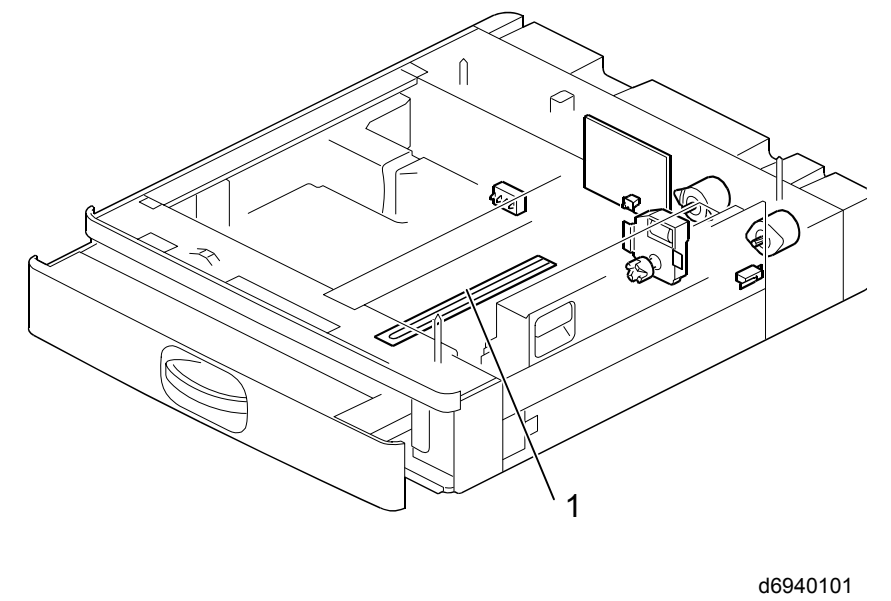


Fig. 18

D176/D177 ELECTRICAL COMPONENT LAYOUT

Symbol	Index No.	Description	P to P
Motors			
M1	Fig.7-1	Duplex Entrance Motor	1-A1
M2	Fig.7-6	By-pass/Duplex Motor	1-B1
M3	Fig.8-1	Inversion Motor	1-D1
M4	Fig.11-6	Registration Motor	1-E1
M5	Fig.11-9	Paper Exit / Pressure Release Motor	1-E1
M6	Fig.11-4	Paper Feed Motor	1-E1
M7	Fig.11-5	Transport Motor	1-E1
M8	Fig.11-8	Fusing Motor	1-F1
M9	Fig.6-2	Lift Motor (1st Feed Tray)	1-A4
M10	Fig.6-4	Lift Motor (2nd Feed Tray)	1-B4
M11	Fig.9-6	Fusing Shield Drive Motor	1-G4
M12	Fig.5-8	Toner Bottle Drive Motor: K	1-A7
M13	Fig.5-6	Toner Bottle Drive Motor: C	1-A7
M14	Fig.5-4	Toner Bottle Drive Motor: M	1-A7
M15	Fig.5-2	Toner Bottle Drive Motor: Y	1-A7
M16	Fig.11-7	PCU Motor: CMY	1-D7
M17	Fig.11-2	Development Motor: CMY	1-D7
M18	Fig.11-3	PCU: Black / Image Transfer Motor	1-D7
M19	Fig.15-1	Paper Transfer Contact Motor	1-E7
M20	Fig.5-16	Toner Transport Motor: K	1-B9
M21	Fig.5-13	Toner Transport Motor: C	1-B9
M22	Fig.5-11	Toner Transport Motor: M	1-B9
M23	Fig.5-9	Toner Transport Motor: Y	1-B9
M24	Fig.2-1	Skew Motor: Y	1-C9
M25	Fig.2-3	Skew Motor: M	1-D9
M26	Fig.2-4	Skew Motor: C	1-D9
M27	Fig.1-6	Scanner Motor	2-C6
M28	Fig.2-5	Polygon Mirror Motor	2-F6

Symbol	Index No.	Description	P to P
Sensors			
SEN1	Fig.8-5	Fusing Entrance Sensor	1-A1
SEN2	Fig.8-4	PTR Open/Close Sensor	1-A1
SEN3	Fig.7-8	Duplex Exit Sensor	1-B1
SEN4	Fig.7-4	Duplex Unit Open/Close Sensor	1-B1
SEN5	Fig.7-3	Duplex Entrance Sensor	1-B1
SEN6	Fig.7-7	By-pass Paper End Sensor	1-C1
SEN7	Fig.13-2	By-pass Paper Length Sensor	1-C1
SEN8	Fig.13-1	By-pass Paper Size Sensor	1-C1
SEN9	Fig.8-2	Inversion Sensor	1-D1
SEN10	Fig.8-3	Paper Exit Sensor	1-C1
SEN11	Fig.6-11	Transport Sensor (1st Feed Tray)	1-D1
SEN12	Fig.6-12	Paper End Sensor (1st Feed Tray)	1-D1
SEN13	Fig.6-13	Limit Sensor (1st Feed Tray)	1-E1
SEN14	Fig.6-5	Registration Sensor	1-F1
SEN16	-	Tray Lift Sensor (1st Feed Tray)	1-A4
SEN17	-	Tray Lift Sensor (2nd Feed Tray)	1-A4
SEN18	Fig.6-8	Transport Sensor (2nd Feed Tray)	1-B4
SEN19	Fig.6-9	Paper End Sensor (2nd Feed Tray)	1-C4
SEN20	Fig.6-10	Limit Sensor (2nd Feed Tray)	1-B4
SEN21	-	Pressure Roller HP Sensor	1-E4
SEN22	Fig.9-5	Fusing Exit Sensor	1-F4
SEN23	Fig.9-1	Fusing Shield Position Sensor 1	1-G4
SEN24	Fig.9-2	Fusing Shield Position Sensor 2	1-G4
SEN25	Fig.5-15	Toner End Sensor: K	1-B7
SEN26	Fig.5-14	Toner End Sensor: C	1-B7
SEN27	Fig.5-12	Toner End Sensor: M	1-C7
SEN28	Fig.5-10	Toner End Sensor: Y	1-C7
SEN29	Fig.3-3	ITB Contact and Release Sensor	1-C7
SEN30	-	Imaging Temperature Sensor	1-C7
SEN31	Fig.5-17	Waste Toner Capacity Sensor	1-E7
SEN32	-	PTR Separation Sensor	1-E7
SEN33	Fig.14-2	HST Sensor: K	1-F8
SEN34	Fig.14-2	HST Sensor: C	1-G8
SEN35	Fig.14-2	HST Sensor: M	1-G8
SEN36	Fig.14-2	HST Sensor: Y	1-G8
SEN37	-	Temperature/Humidity Sensor	1-A9
SEN40	Fig.3-4/5/6	ID sensor	2-F8/2-G8
SEN41	Fig.1-7	Auto Paper Size Detection Sensor 1	2-B6
SEN42	Fig.1-8	Auto Paper Size Detection Sensor 2	2-B6
SEN43	Fig.1-2	Scanner Home Position Sensor	2-C6
SEN44	Fig.1-4	DF Position Sensor	2-C6

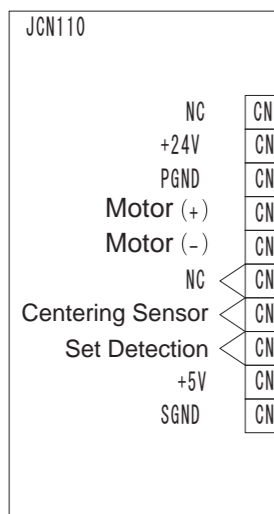
D176/D177 ELECTRICAL COMPONENT LAYOUT

Symbol	Index No.	Description	P to P
Switches			
SW1	Fig.6-1	Tray Set Switch (1st Feed Tray)	1-A4
SW2	Fig.6-3	Tray Set Switch (2nd Feed Tray)	1-B4
SW3	Fig.5-18	Waste toner Bottle Set Switch	1-E7
SW4	Fig.3-1	Interlock Switch: Front Cover (LD Safety Switch)	1-D9
SW5	Fig.3-2	Interlock Switch: Duplex Unit (LD Safety Switch)	1-D9
SW6	Fig.12-1	Main Power Switch	2-D3
SW7	Fig.6-6	Size Switch (2nd Feed Tray)	1-B4
SW8	Fig.7-2	Right Door Open/Close Switch	1-F1
Solenoids			
SOL1	Fig.7-5	By-pass Pick-up Solenoid	1-B1
SOL2	Fig.8-6	Paper Exit Solenoid	1-C1
SOL3	Fig.6-15	Pick-up Solenoid (1st Feed Tray)	1-D1
SOL4	Fig.6-14	Pick-up Solenoid (2nd Feed Tray)	1-B4
SOL5	-	Development Solenoid	1-D7
Fans			
FAN1	Fig.10-7	Fusing Exhaust Heat Fan	1-E1
FAN2	Fig.10-4	PSU Cooling Fan	1-C5
FAN3	Fig.10-5	Ozone Exhaust Fan	1-D5
FAN4	Fig.12-8	Controller Box Cooling Fan	1-F7
FAN5	Fig.10-6	Toner Supply Cooling Fan	1-F7
FAN6	Fig.10-2	Developing Air Intake Fan:Right	1-A9
FAN7	Fig.10-3	Developing Air Intake Fan:Left	1-A9
FAN8	Fig.10-1	Paper Exit Cooling Fan	1-A9
PCBs			
PCB1	Fig.12-2	HVP TTS	1-B7
PCB2	-	HVP CB	1-E7
PCB3	-	MKB	1-D4
PCB4	Fig.12-4	Paper Transport IOB	1-A3
PCB5	Fig.11-1	Imaging IOB	1-A5
PCB6	Fig.12-5	PSU (DC)	1-F1
PCB7	Fig.5-7	ID Chip: K	1-A7
PCB8	Fig.5-5	ID Chip: C	1-A7
PCB9	Fig.5-3	ID Chip: M	1-A7
PCB10	Fig.5-1	ID Chip: Y	1-A7
PCB11	Fig.12-6	PSU (AC controller board)	1-C4
PCB12	Fig.1-5	SIO	2-B4
PCB13	Fig.12-9	IPU	2-D4
PCB14	Fig.12-3	Controller Board	2-D5
PCB15	Fig.12-7	BCU	2-F6
PCB16	-	Heater Board	2-G2
PCB17	Fig.1-9	SBU	2-B6
PCB18	Fig.2-2	Synchronizing Detector Board: M/Y-S	2-F6
PCB19	Fig.2-6	Synchronizing Detector Board: Bk/C-S	2-F6

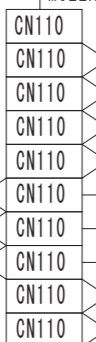
Symbol	Index No.	Description	P to P
LEDs			
LED1	Fig.17-1	1bin LED	1-E4
Heaters			
H1	Fig.6-7	Paper Feed Heater	2-G4
H2	Fig.18-1	Bank Heater	2-G4
H3	Fig.1-3	Scanner Anti-condensation Heater	2-G4
H4	-	PCU Anti-condensation Heater	2-G4
Thermostats/Thermistors			
TH1	Fig.9-4	Thermopile (Center)	1-F4
TH2	Fig.9-3	Thermopile (Edge)	1-F4
TH3	Fig.9-12	Pressure Thermistor: Center	2-A9
TH4	Fig.9-9	Pressure Thermistor: Edge	2-A9
TH5	Fig.9-8	Pressure Thermistor: Full-Bleed Edge	2-A9
TH6	-	Heating Roller: End /N	2-C9
TH7	-	Heating Roller: Center/N	2-C9
TH8	-	Pressure Roller: Center/L	2-C9
TH9	Fig.9-11	Non-Contact Thermistor (Center)	2-A9
TH10	Fig.9-10	Non-Contact Thermistor (Edge)	2-B9
Lamps			
L1	Fig.14-1	Quenching Lamp	1-F8
Others			
-	Fig.1-1	Operation Panel	2-C6
-	Fig.4-4	PCDU: K (Charge unit)	2-D9
-	Fig.4-3	PCDU: C (Charge unit)	2-D9
-	Fig.4-2	PCDU: M (Charge unit)	2-D9
-	Fig.4-1	PCDU: Y (Charge unit)	2-D9
-	Fig.4-4	PCDU: K (Development unit)	2-E9
-	Fig.4-3	PCDU: C (Development unit)	2-E9
-	Fig.4-2	PCDU: M (Development unit)	2-E9
-	Fig.4-1	PCDU: Y (Development unit)	2-E9
-	-	Key-counter	1-D4
-	-	1bin Tray	1-E4
-	-	Bank	1-E4
-	-	New unit Detection Fuse	2-B9
-	-	Set detection:GND	2-B9
-	-	Set detection: NA	2-B9
-	-	Set detection: EU	2-B9
-	-	Set detection: Sub (JPN)	2-B9
-	-	Set detection: Sub (TWN)	2-C9

D691 POINT TO POINT DIAGRAM

MOLEX Connector
55949 18P

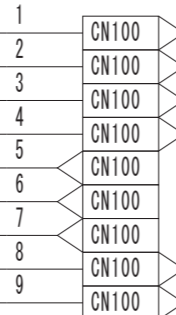


MOLEX miniMi2 10P

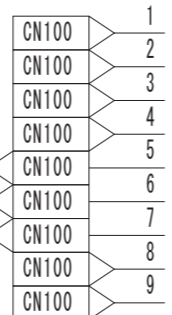


(D6915401)

AMP CT Black 9P



AMP CT Black 9P



PCB: SHIFT

AMP CT Black 2P

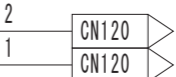


AMP CT Black 2P

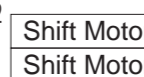


(D6915402)

AMP CT Black 2P

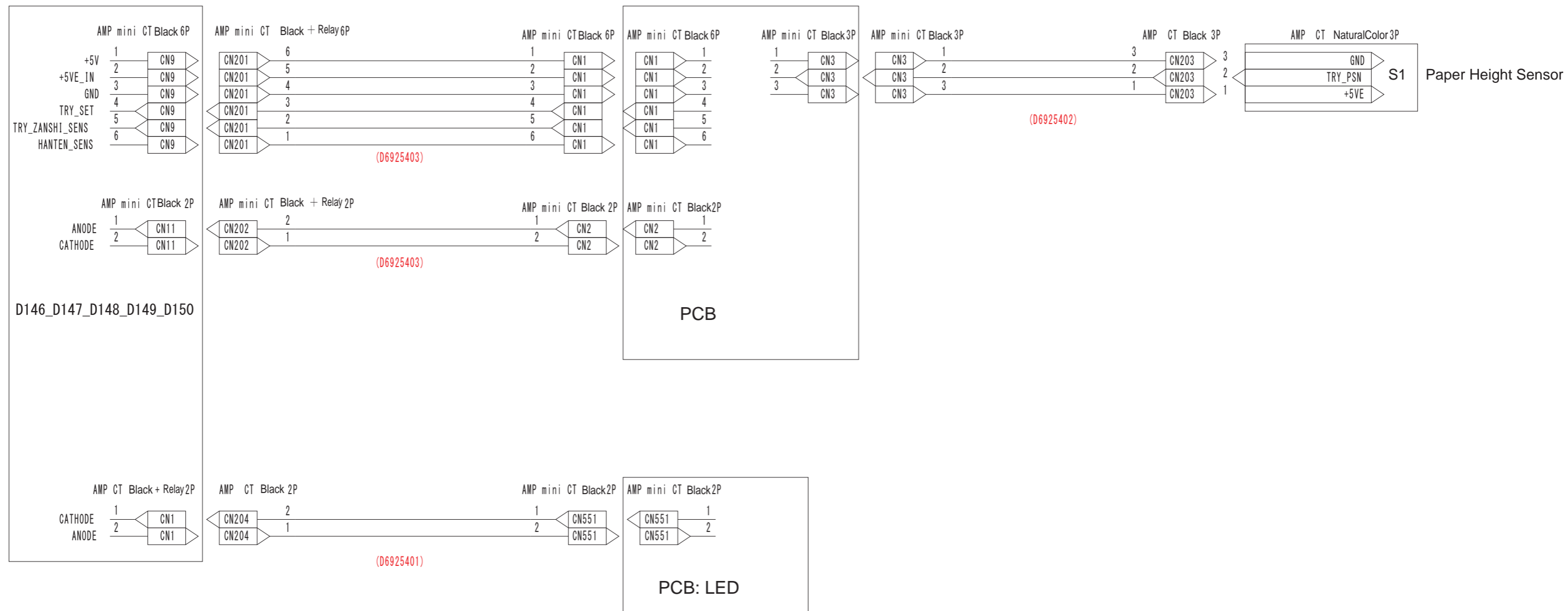


AMP CT 2P

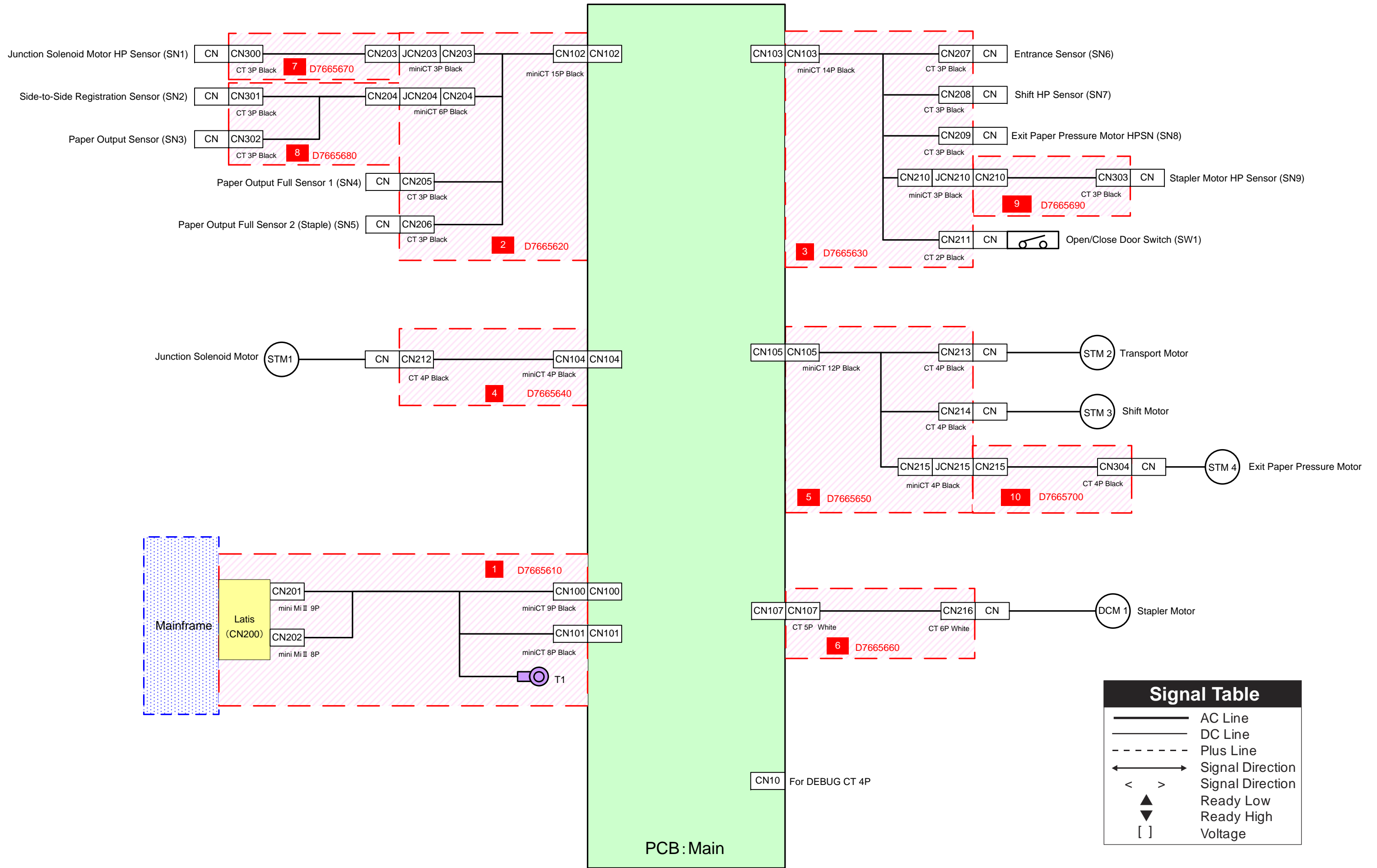


M1

D692 POINT TO POINT DIAGRAM



D766 POINT TO POINT DIAGRAM



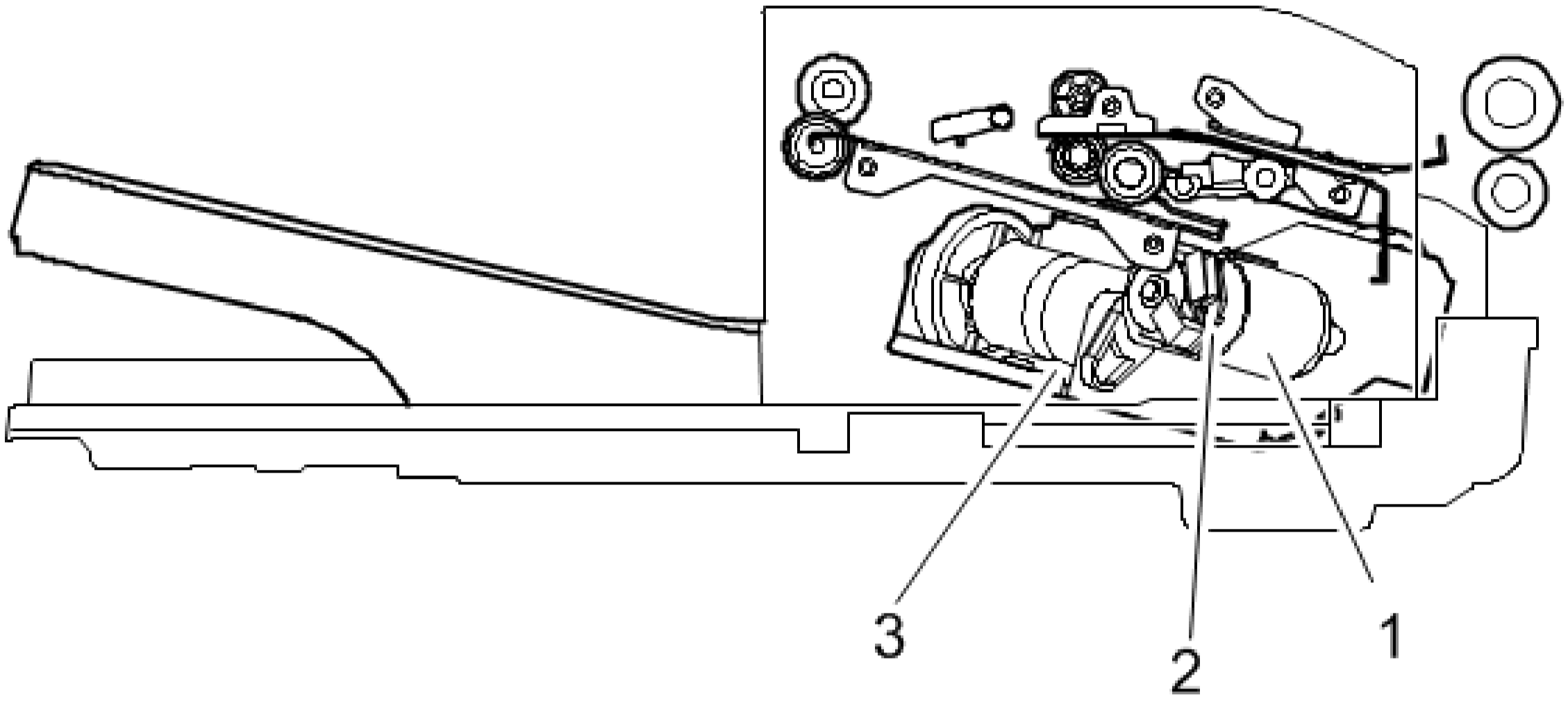
Signal Table	
	AC Line
	DC Line
	Plus Line
	Signal Direction
	Signal Direction
	Ready Low
	Ready High
	Voltage

D766 Harness Pin Assignment

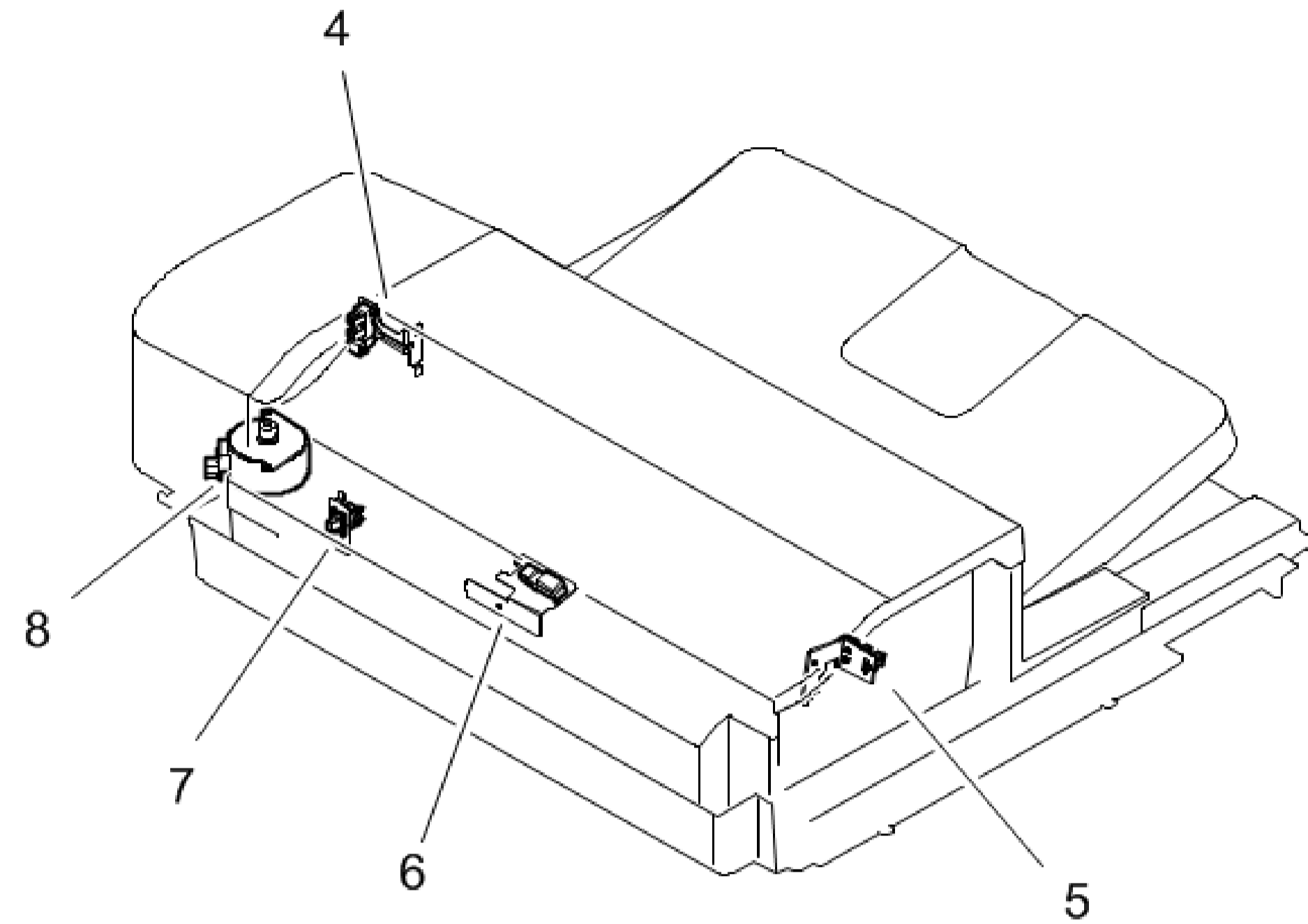
Harness No.	Connector (FROM)			Signal Information				Connector (TO)				
	No.	To Connector	Pin No.	Signal Name	Direction	L	H	No.	To Connector	Pin No.		
1	CN100	MAIN	1	N.C.				CN201	Mainframe	9		
			2	24V_PD						8		
			3	24V_PD						7		
			4	24V_PD						6		
			5	24V_PD						5		
			6	GND						4		
			7	GND						3		
			8	GND						2		
			9	GND						1		
	CN101	MAIN	1	GND				CN202	Mainframe	8		
			2	GND						7		
			3	N.C.						6		
			4	N.C.						5		
			5	RXD0	←					4		
			6	N.C.						3		
			7	TXD0	→					2		
8			N.C.				1					
T1	F.G.		F.G. (ground)				shield					
2	CN102	MAIN	1	GND: Junction Solenoid Motor HPSN				CN203	-	3		
			2	Vout: Junction Solenoid Motor HPSN	←	Not Detected	Detected			2		
			3	5V: Junction Solenoid Motor HPSN						1		
			4	GND: Side-to-Side Registration SN				CN204	-	6		
			5	Vout: Side-to-Side Registration SN	←	Not Detected	Detected			5		
			6	5V: Side-to-Side Registration SN						4		
			7	GND: Paper Output SN						3		
			8	Vout: Paper Output SN	←	Not Detected	Detected			2		
			9	5V: Paper Output SN						1		
			10	GND: Paper Output Full SN1				CN205	Paper Output Full SN1	3		
			11	Vout: Paper Output Full SN1	←	Not Detected	Detected			2		
			12	5V: Paper Output Full SN1						1		
			13	GND: Paper Output Full SN2 (Staple)						CN206	Paper Output Full SN2 (Staple)	3
			14	Vout: Paper Output Full SN2 (Staple)	←	Not Detected	Detected					2
			15	5V: Paper Output Full SN2 (Staple)				1				
3	CN103	MAIN	1	GND: Entrance SN				CN207	Entrance SN	3		
			2	Vout: Entrance SN	←	Not Detected	Detected			2		
			3	5V: Entrance SN						1		
			4	GND: Shift M HPSN				CN208	Shift M HPSN	3		
			5	Vout: Shift M HPSN	←	Not Detected	Detected			2		
			6	5V: Shift M HPSN						1		
			7	GND: Exit Paper Pressure Motor HPSN				CN209	Exit Paper Pressure Motor HPSN	3		
			8	Vout: Exit Paper Pressure Motor HPSN	←	Not Detected	Detected			2		
			9	5V: Exit Paper Pressure Motor HPSN						1		
			10	GND: Stapler M HPSN				CN210	-	3		
			11	Vout: Stapler M HPSN	←	Not Detected	Detected			2		
			12	5V: Stapler M HPSN						1		
			13	Open/Close Door SW	←	Close	Open	CN211	Open/Close Door SW	2		
			14	GND						1		
4	CN104	MAIN	1	Junction Solenoid Motor A Relative	→			CN212	Junction Solenoid Motor	4		
			2	Junction Solenoid Motor AB Relative	→					3		
			3	Junction Solenoid Motor B Relative	→					2		
			4	Junction Solenoid Motor BB Relative	→					1		
5	CN105	MAIN	1	Transport M A Relative	→			CN213	Transport Motor	4		
			2	Transport M AB Relative	→					3		
			3	Transport M B Relative	→					2		
			4	Transport M BB Relative	→					1		
			5	Shift M A Relative	→			CN214	Shift Motor	4		
			6	Shift M AB Relative	→					3		
			7	Shift M B Relative	→					2		
			8	Shift M BB Relative	→					1		
			9	Exit Paper Pressure Motor A Relative	→			CN215	-	4		
			10	Exit Paper Pressure Motor AB Relative	→					3		
			11	Exit Paper Pressure Motor B Relative	→					2		
			12	Exit Paper Pressure Motor BB Relative	→					1		

Harness No.	Connector (FROM)			Signal Information				Connector (TO)		
	No.	To Connector	Pin No.	Signal Name	Direction	L	H	No.	To Connector	Pin No.
6	CN107	MAIN	1	Stapler Motor M-	→			CN216	Stapler Motor	6
			2	Stapler Motor M+	→					5
			3	5V						4
			4	GND						3
			5	Stapler Motor ENC	←					2
				N.C.						1
7	CN203	MAIN	1	GND: Junction Solenoid Motor HPSN				CN300	Junction Solenoid Motor HPSN	3
			2	Vout: Junction Solenoid Motor HPSN	←	Not Detected	Detected			2
			3	5V: Junction Solenoid Motor HPSN						1
8	CN204	MAIN	1	GND: Side-to-Side Registration SN				CN301	Side-to-Side Registration SN	3
			2	Vout: Side-to-Side RegistrationSN	←	Not Detected	Detected			2
			3	5V: Side-to-Side RegistrationSN						1
			4	GND: Paper Output SN				CN302	Paper Output SN	3
			5	Vout: Paper Output SN	←	Not Detected	Detected			2
			6	5V: Paper Output SN						1
9	CN210	MAIN	1	GND: StaplerM HPSN				CN303	Stapler M HPSN	3
			2	Vout: StaplerM HPSN	←	Not Detected	Detected			2
			3	5V: StaplerM HPSN						1
10	CN215	MAIN	1	Exit Paper Pressure Motor A Relative	→			CN304	Exit Paper Pressure Motor	4
			2	Exit Paper Pressure Motor M AB Relative	→					3
			3	Exit Paper Pressure Motor B Relative	→					2
			4	Exit Paper Pressure Motor BB Relative	→					1

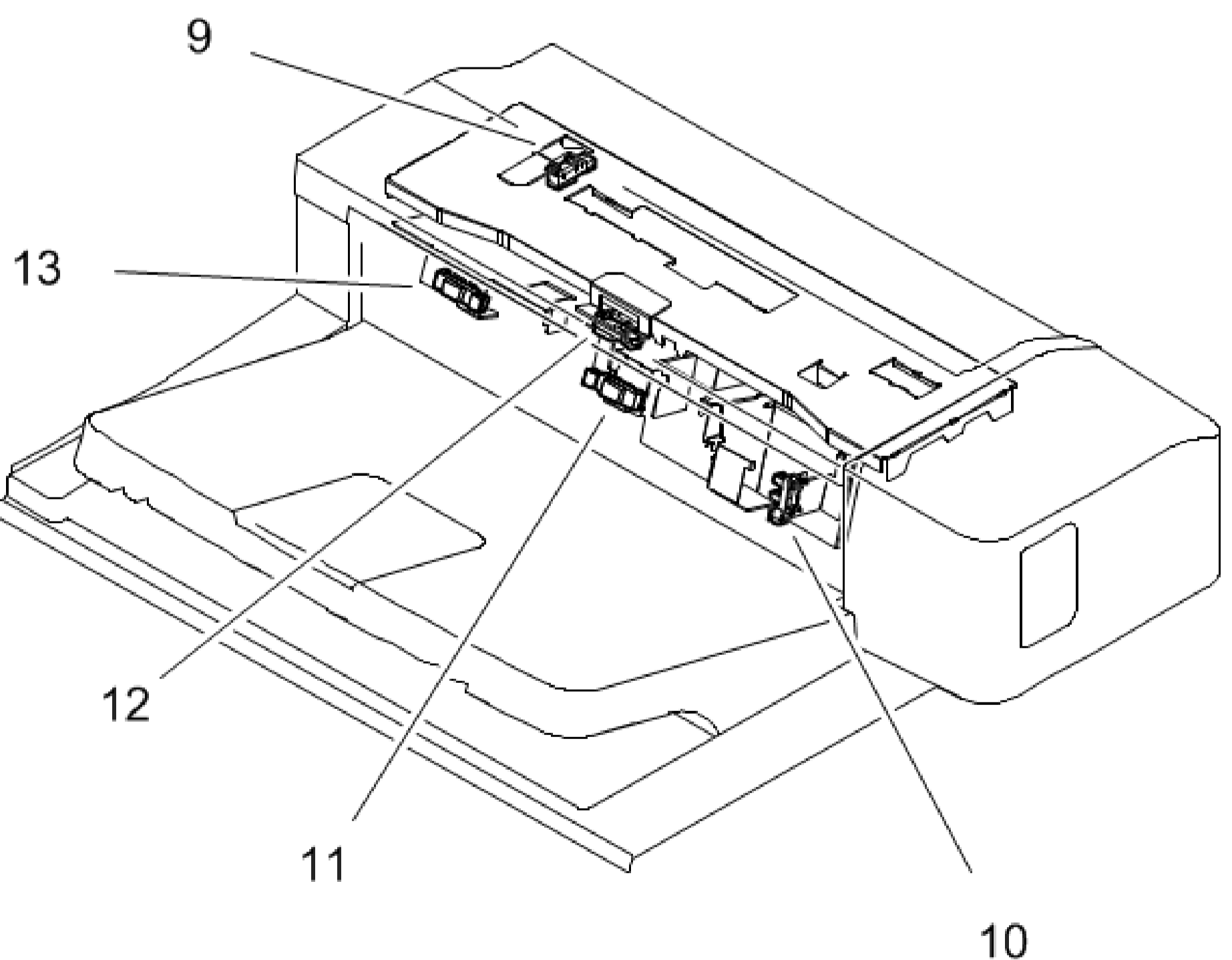
D766 ELECTRICAL COMPONENT LAYOUT (1/2)



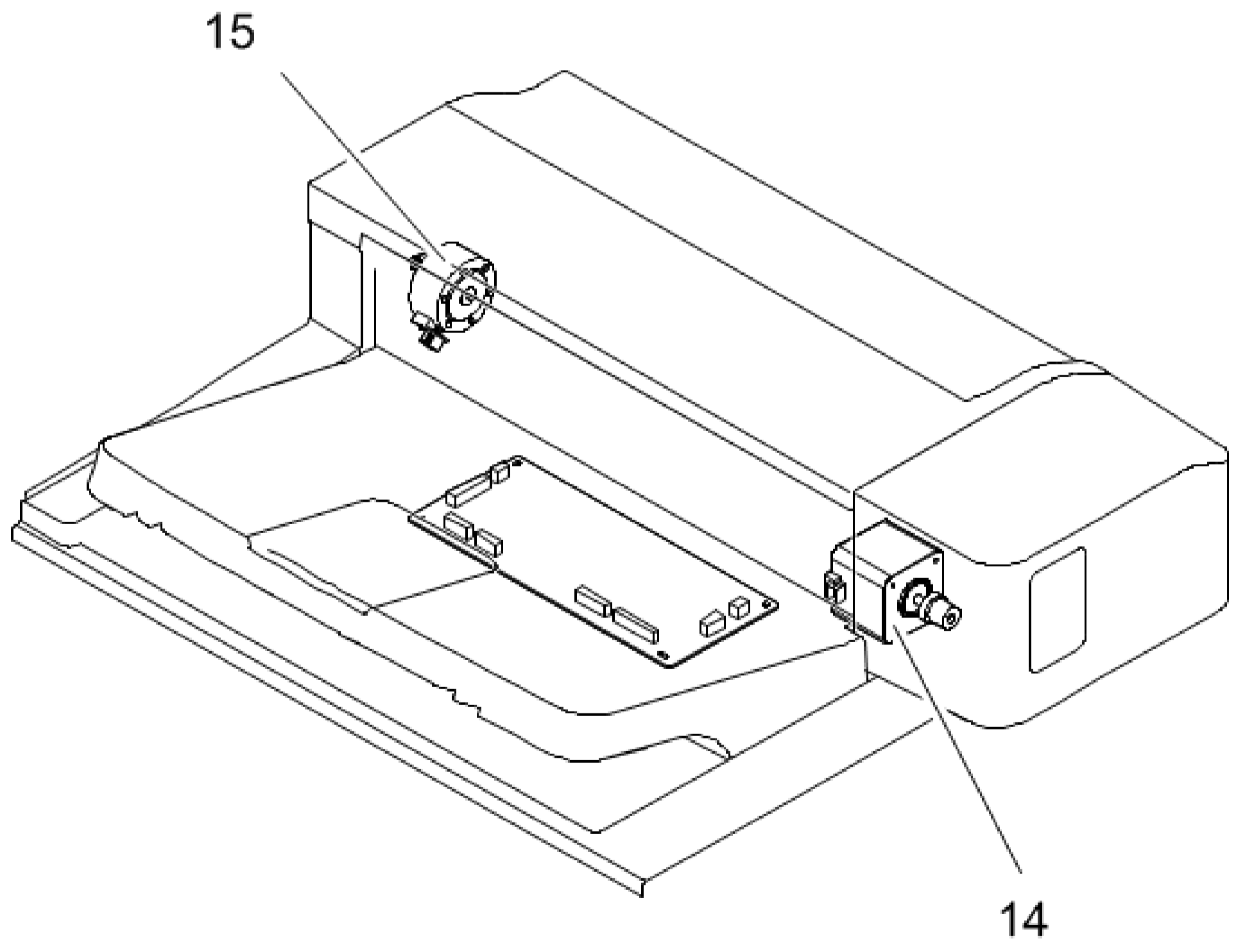
d766f0001



d766f0002



d766f0003

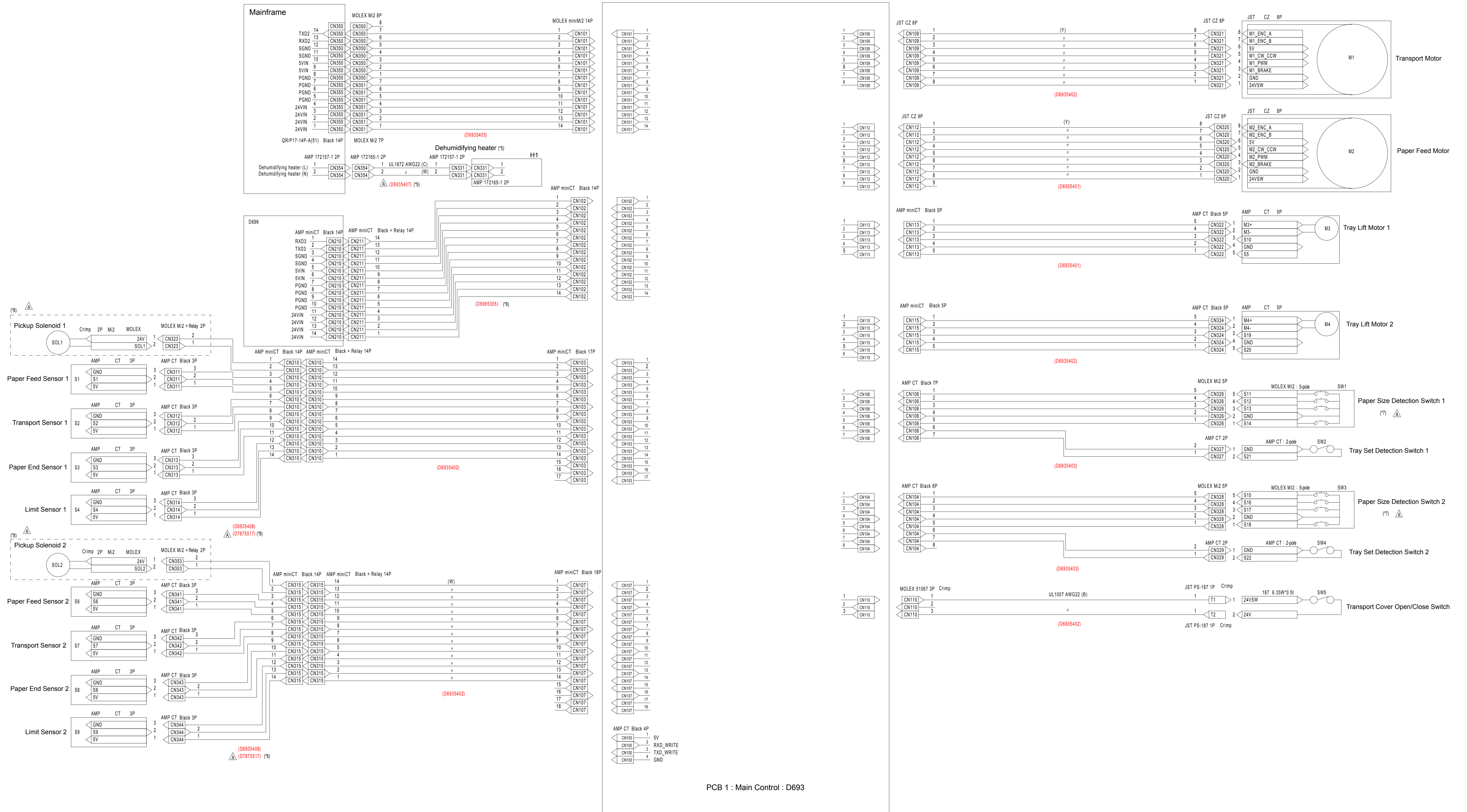


d766f0004

D766 ELECTRICAL COMPONENT LAYOUT (2/2)

Motors			
Symbol	Index No.	Description	PtoP
STM1	15	Junction Solenoid Motor	D3
STM2	14	Transport Motor	D8
STM3	8	Shift Motor	D8
STM4	3	Exit Paper Pressure Motor	D9
DCM1	1	Stapler Motor	E8
Sensors			
Symbol	Index No.	Description	PtoP
SN1	5	Junction Solenoid Motor HP Sensor	B2
SN2	9	Side-to-Side Registration Sensor	B2
SN3	12	Paper Output Sensor	B2
SN4	11	Paper Output Full Sensor 1	B3
SN5	13	Paper Output Full Sensor 2 (Staple)	C3
SN6	6	Entrance Sensor	B8
SN7	4	Shift HP Sensor	B8
SN8	10	Exit Paper Pressure Motor HP Sensor	B8
SN9	2	Stapler Motor HP Sensor	B9
Switches			
Symbol	Index No.	Description	PtoP
SW1	7	Open/Close Door SW	C8

D787 POINT TO POINT DIAGRAM



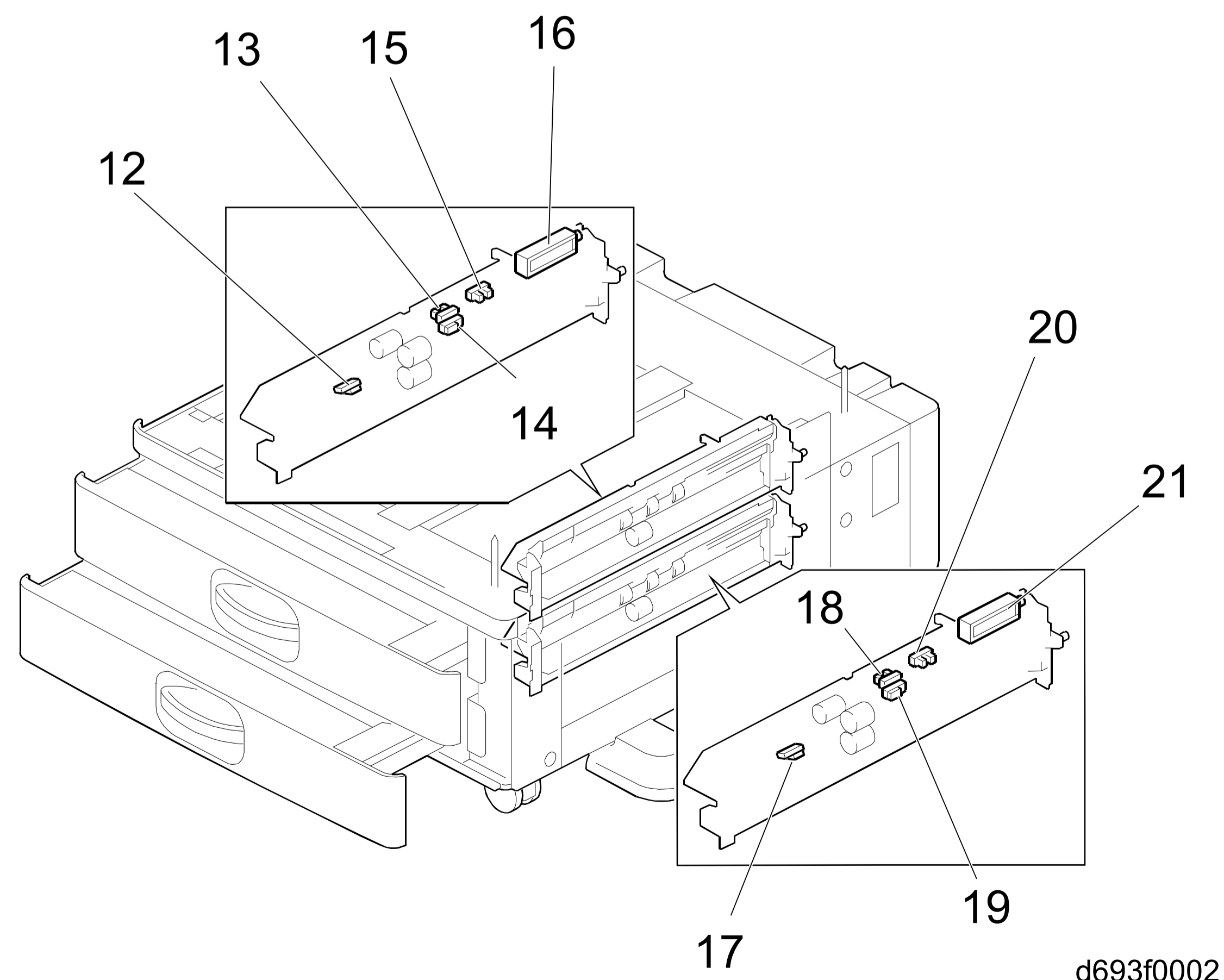
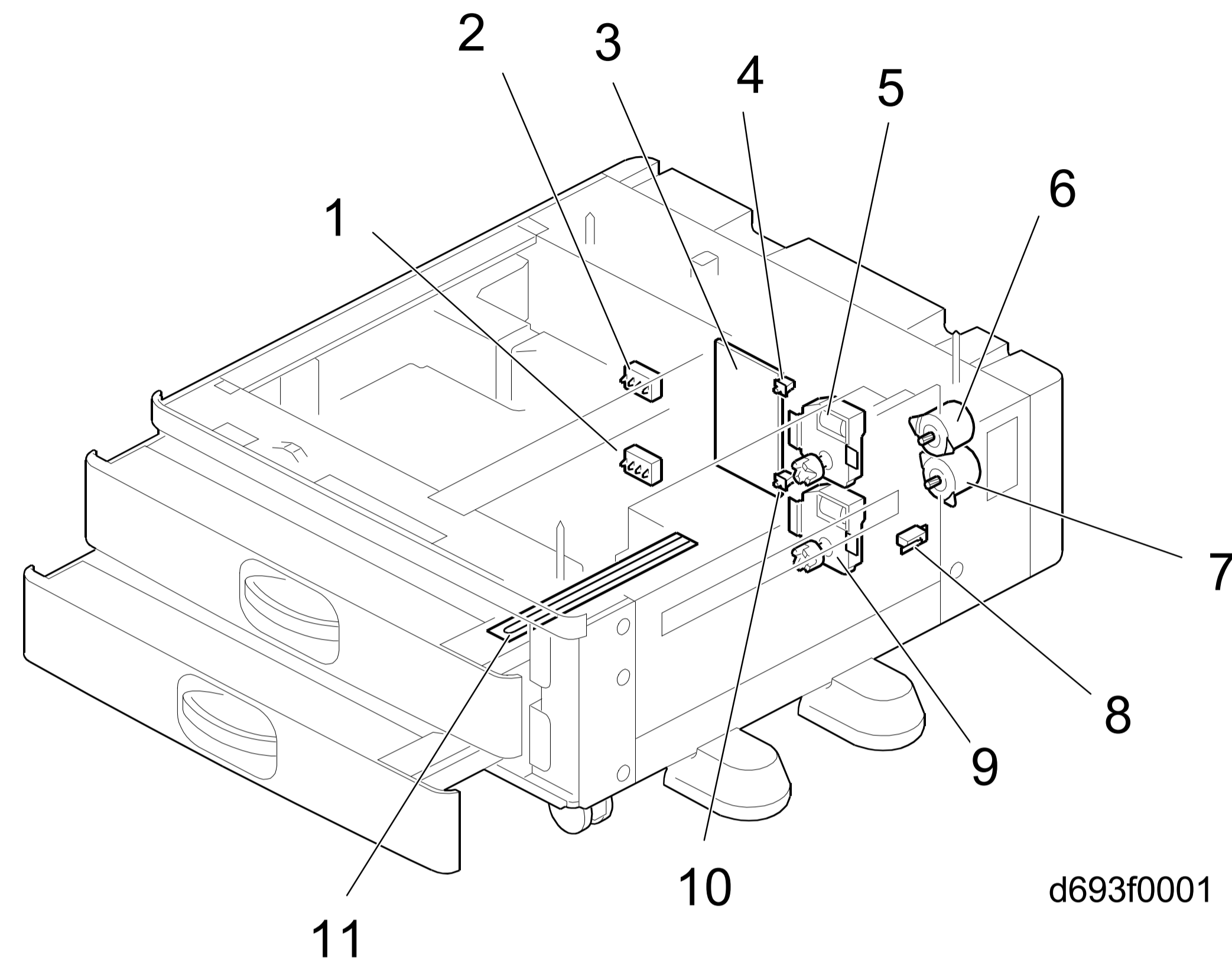
⚠ 8. Not implemented for D787-17-21
 ⚠ 7. Only implemented for D787
 6. The harness is including in D696
 ⚠ 5. Service options for D693/D787-17, D693/D787-21 (NA/EU)
 4. The connector with no indication is press-connect type, and its connector is the natural color.
 3. The color of Electric wire with no indication is purple (M).
 2. The UL style of electric wire with no indication is UL10272. AWG size is AWG26, and its color is purple (M).
 (*) 1. Suffix is omitted.

D787 Harness Pin Assignment

Connector Information			Signal Information	
No.	Connector	Pin No.	Signal Name	Use
CN101	MOLEX miniMi2 14P Upper ASAP I/F	1	TXD2	ASAP-I/F Transmission
		2	RXD2	ASAP-I/F Reception
		3	SGND	SGND
		4	SGND	SGND
		5	5VIN	5V Power Supply
		6	5VIN	5V Power Supply
		7	PGND	PGND
		8	PGND	PGND
		9	PGND	PGND
		10	PGND	PGND
		11	24VIN	24V Power Supply
		12	24VIN	24V Power Supply
		13	24VIN	24V Power Supply
		14	24VIN	24V Power Supply
CN102	AMP miniCT 14P Black Lower ASAP I/F	1	RXD3	ASAP-I/F Transmission
		2	TXD3	ASAP-I/F Reception
		3	SGND	SGND
		4	SGND	SGND
		5	5VIN	5V Power Supply
		6	5VIN	5V Power Supply
		7	PGND	PGND
		8	PGND	PGND
		9	PGND	PGND
		10	PGND	PGND
		11	24VIN	24V Power Supply
		12	24VIN	24V Power Supply
		13	24VIN	24V Power Supply
		14	24VIN	24V Power Supply
CN103	AMP miniCT 17P Black Sensor Input 1	1	24V	24V Power Supply
		2	SOL1	SOL1 Drive
		3	GND	GND
		4	S1	Sensor IN_S1
		5	5V	5V
		6	GND	GND
		7	S2	Sensor IN_S2
		8	5V	5V
		9	GND	GND
		10	S3	Sensor IN_S3
		11	5V	5V
		12	GND	GND
		13	S4	Sensor IN_S4
		14	5V	5V
		15	N.C.	N.C.
		16	N.C.	N.C.
		17	N.C.	N.C.
CN104	AMP CT 8P Black Sensor Input 4	1	S15	Sensor IN_S15
		2	S16	Sensor IN_S16
		3	S17	Sensor IN_S17
		4	GND	GND
		5	S18	Sensor IN_S18
		6	GND	GND
		7	S22	Sensor IN_S22
		8	N.C.	N.C.
CN106	AMP CT 7P Black Sensor Input 3	1	S11	Sensor IN_S11
		2	S12	Sensor IN_S12
		3	S13	Sensor IN_S13
		4	GND	GND
		5	S14	Sensor IN_S14
		6	GND	GND
		7	S21	Sensor IN_S21

Connector Information			Signal Information	
No.	Connector	Pin No.	Signal Name	Use
CN107	AMP miniCT 18P Black Sensor Input 2	1	24V	24V Power Supply
		2	SOL2	SOL2 Drive
		3	GND	GND
		4	S6	Sensor IN_S6
		5	5V	5V
		6	GND	GND
		7	S7	Sensor IN_S7
		8	5V	5V
		9	GND	GND
		10	S8	Sensor IN_S8
		11	5V	5V
		12	GND	GND
		13	S9	Sensor IN_S9
		14	5V	5V
		15	N.C.	N.C.
		16	N.C.	N.C.
		17	N.C.	N.C.
		18	N.C.	N.C.
CN109	JST CZ 8P Transport Motor (Drive)	1	M1_ENC_A	
		2	M1_ENC_B	
		3	5V	5V Power Supply
		4	M1_CW_CCW	
		5	M1_PWM	
		6	M1_BRAKE	
		7	GND	GND
		8	24VSW	24V Power Supply
CN110	MOLEX 3.5mm pitch 3P Cover Open/Close Detection	1	24V	24V Power Supply
		2	N.C.	N.C.
		3	24VSW	24VSW Power Supply
CN112	JST CZ 9P Paper Feed Motor (Drive)	1	M2_ENC_A	
		2	M2_ENC_B	
		3	5V	5V Power Supply
		4	M2_CW_CCW	
		5	M2_PWM	
		6	M2_BRAKE	
		7	GND	GND
		8	24VSW	24V Power Supply
		9	N.C.	N.C.
CN113	AMP miniCT 5P Black Tray Lift Motor 1 (Drive)	1	S5	Sensor IN_S5
		2	GND	GND
		3	S10	Sensor IN_S6
		4	M3-	Lift 1M-
		5	M3+	Lift 1M+
CN115	AMP miniCT 6P Black Tray Lift Motor 2 (Drive)	1	S20	Sensor IN_S20
		2	GND	GND
		3	S19	Sensor IN_S19
		4	M4-	Lift 2M-
		5	M4+	Lift 2M+
		6	N.C.	N.C.

D787 ELECTRICAL COMPONENT LAYOUT



Motors			
Symbol	Index No.	Description	PtoP
M1	7	Transport Motor	C15
M2	6	Paper Feed Motor	D15
M3	5	Tray Lift Motor 1	D15
M4	9	Tray Lift Motor 2	E15
Sensors			
Symbol	Index No.	Description	PtoP
S1	12	Paper Feed Sensor 1	F1
S2	14	Transport Sensor 1	G1
S3	13	Paper End Sensor 1	G1
S4	15	Limit Sensor 1	H1
S6	17	Paper Feed Sensor 2	I1
S7	19	Transport Sensor 2	I1
S8	18	Paper End Sensor 2	J1
S9	20	Limit Sensor 2	J1
Switches			
Symbol	Index No.	Description	PtoP
SW1	2	Paper Size Detection Switch 1	F15
SW2	1	Paper Size Detection Switch 2	G15
SW3	4	Tray Set Detection Switch 1	G15
SW4	10	Tray Set Detection Switch 2	H15
SW5	8	Transport Cover Open/Close Switch	I15
Solenoids			
Symbol	Index No.	Description	PtoP
SOL1	16	Pick-up Solenoid 1	F1
SOL2	21	Pick-up Solenoid 2	H1
PCB			
Symbol	Index No.	Description	PtoP
PCB1	3	Bank Control Board	K9
Others			
Symbol	Index No.	Description	PtoP
H1	11	Dehumidifying heater	D6