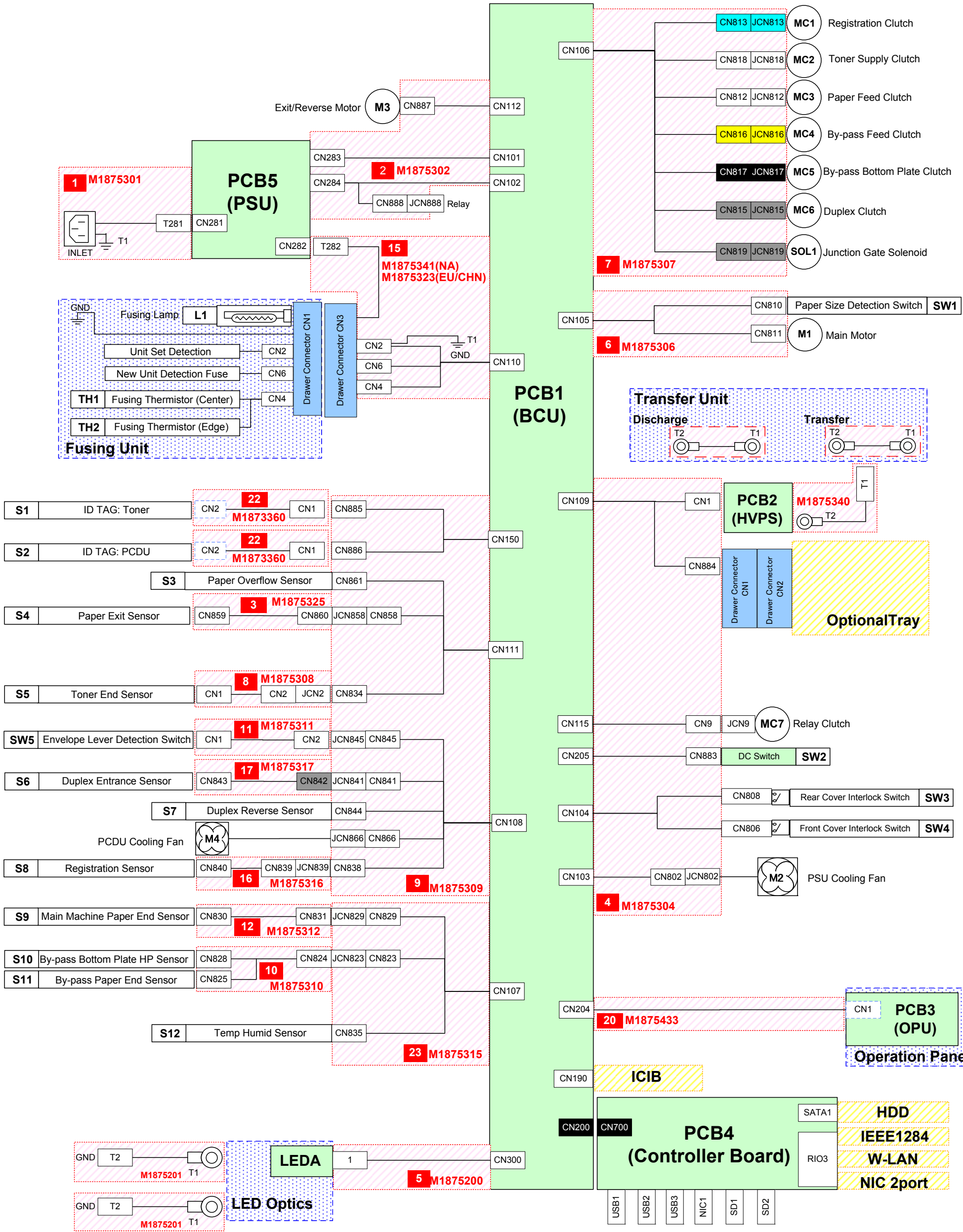
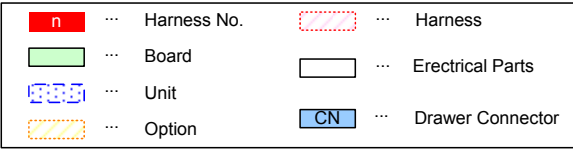


M187 POINT TO POINT DIAGRAM

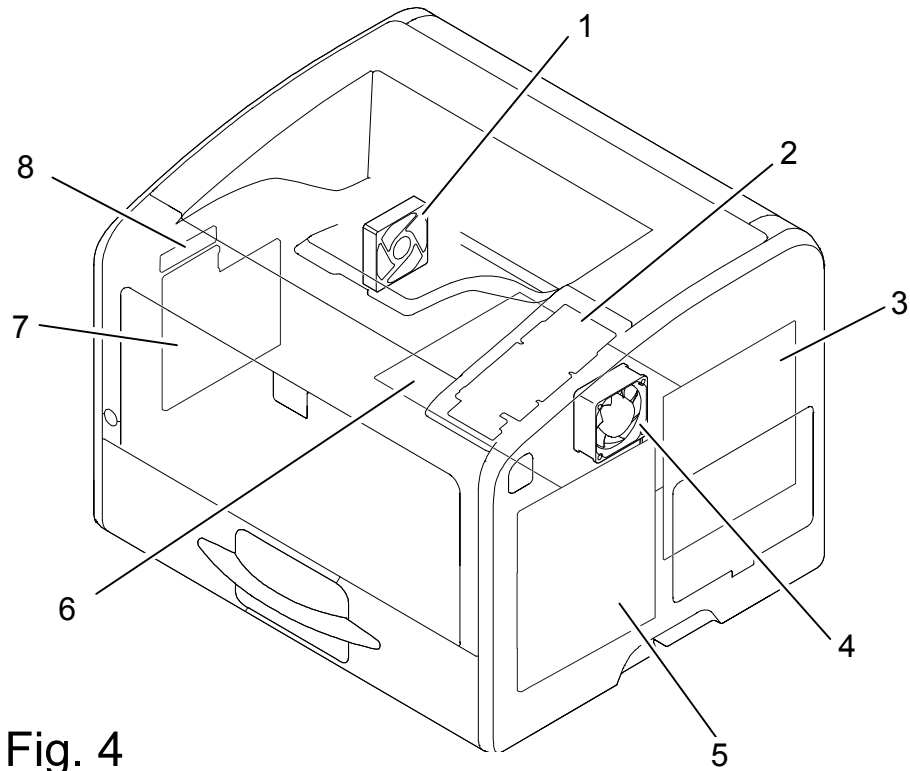
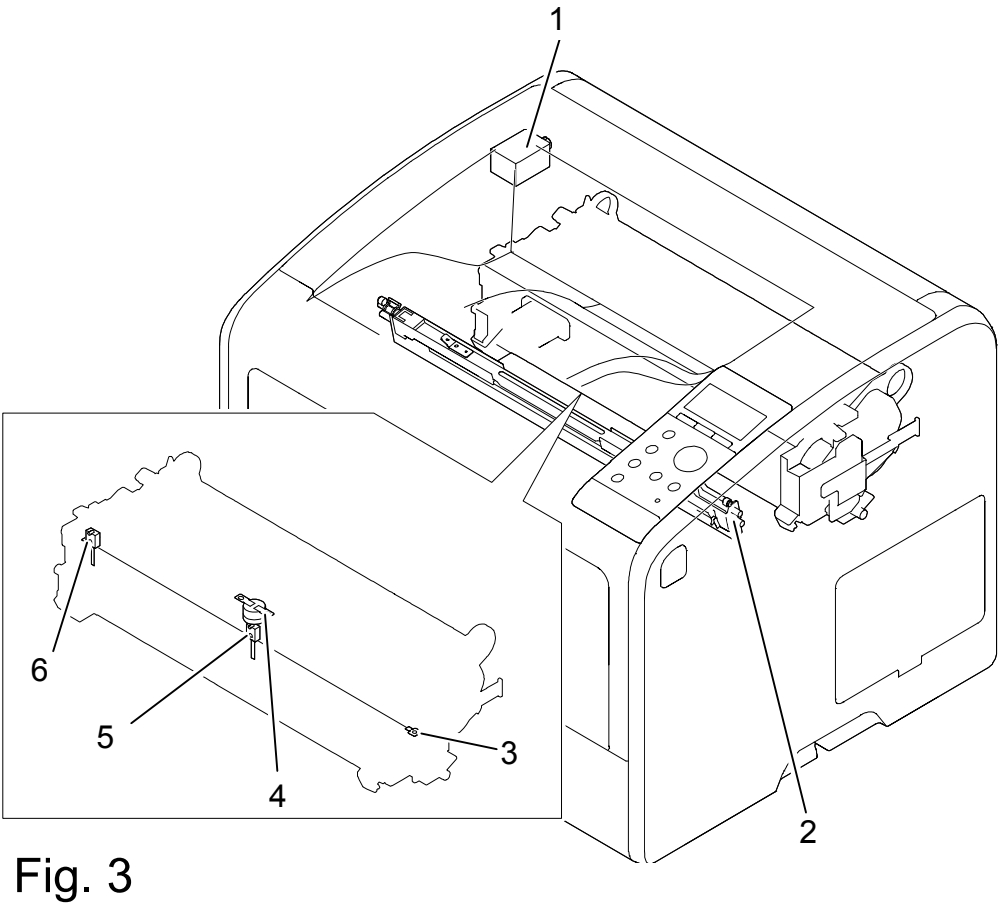
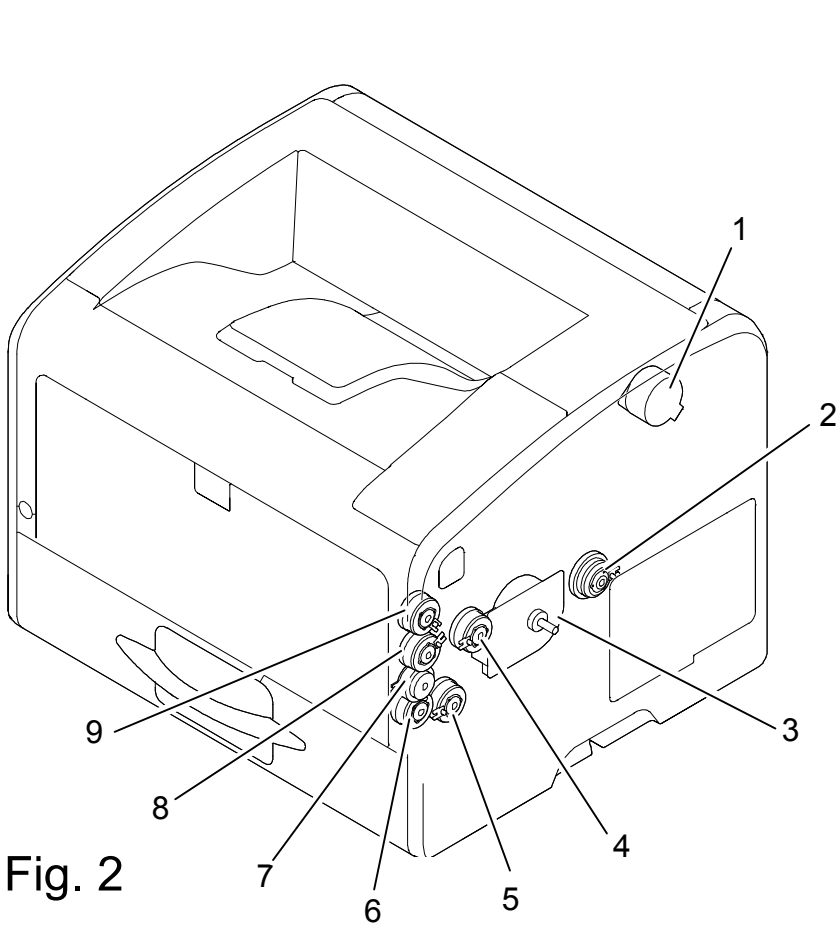
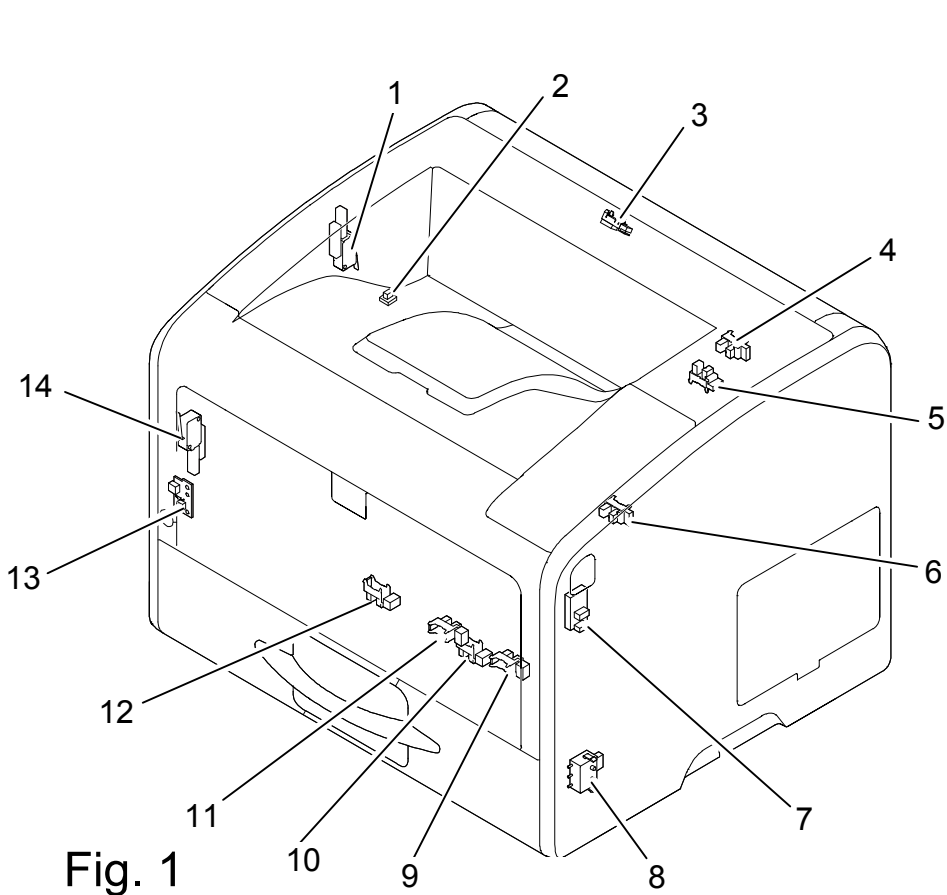


M187 PIN ASIGN LIST

Harness No.	Connector (From)			Signal Information	I/O	Connector (To)			Relay Harness					
	To Connector	Addr.	Pin No.			Addr.	Pin No.	To Connector						
1	PSU	CN281	1	AC-IN/L	P	Inlet-L	1	AC IN						
			2	AC-IN/N	P	Inlet-N	1							
2	BCU	CN112	1	Exit/Reverse Motor :XB	O	CN887	1	Exit/Reverse Motor						
			2	Exit/Reverse Motor :XA	O		3							
			3	Exit/Reverse Motor :B	O		2							
			4	Exit/Reverse Motor :A	O		4							
	PSU	CN283	1	+5V	P	CN101	8	BCU						
			2	+5VX	P		7							
			3	+5VX	P		6							
			4	GND	G		5							
			5	GND	G		4							
			6	GND	G		3							
			7	+24V	P		2							
			8	+24VL	P		1							
		CN284	1	Fusing Relay :-		CN888	2	Relay						
			2	Fusing Relay :+			1							
			3	Fusing +24VS : Inerlock	P	CN102	6	BCU						
			4	GND	G		5							
			5	Zero-Cross Signal	I		4							
			6	Energy Saving	O		3							
			7	Fusing Lamp:Relay	O		2							
			8	Fusing Lamp:Trigger	O		1							
			9	-	N		-							
			4	BCU	CN103	1	PSU Cooling Fan :+5V	O	CN802	3	PSU Cooling Fan			
						2	PSU Cooling Fan :Set	I		2				
						3	PSU Cooling Fan :GND	G		1				
					CN104	1	+24VL	P	CN808	1	Rear Cover Interlock Switch			
						2	+24VSR	P		2				
						3	+24VSR	P	CN806	1	Front Cover Interlock Switch			
					CN205	4	+24VS	P		2				
						1	DC Switch ON	I	CN883	2	DC Switch			
2	Power	G					1							
CN109	1	+5V			P	CN884	12	Optional Trav						
	2	Bank :Motor Lock			O		11							
	3	GND			G		10							
	4	Bank :Serial Clock			O		9							
	5	Bank :Serial data Input			I		8							
	6	Bank :Serial data Output			O		7							
	7	GND			G		6							
	8	GND			G		5							
	9	+24V			P		4							
	10	+24V			P		3							
	-	N.C.			N		2							
	-	N.C.			N		1							
	11	HVP :DV,BL,R ON			O	CN1	9	HVPS						
	12	HVP :Paper Transfer:- PWM			O				8					
	13	HVP :Paper Tranfer+: PWM			O				7					
	14	HVP :Development: PWM			O				6					
	15	HVP :Charging: PWM			O				5					
	16	HVP :Transfer SC Detect			I				4					
	17	HVP :Charging/Developng SC Detetct			I				3					
18	GND	G					2							
19	+24VS	P		1										
CN115	1	Relay CL :+24VS	P	CN9	2	Reral Clutch								
	2	Relay CL	O		1									
5	BCU	CN300	1	GND	G	-	26	LEDA						
			2	CLK+	O		25							
			3	CLK-	O		24							
			4	GND	G		23							
			5	LOAD/WPN/HOLDN	O		22							
			6	HSYNC/CSN	O		21							
			7	DATA13	O		20							
			8	DATA12	O		19							
			9	DATA11	O		18							
			10	DATA10	O		17							
			11	DATA03	O		16							
			12	DATA02	O		15							
			13	DATA01	O		14							
			14	DATA00	O		13							
			15	STBN/SI	O		12							
			16	SCK	O		11							
			17	SO	I		10							
			18	+3.3V_LED	P		9							
			19	GND	G		8							
			20	+5V_LED	P		7							
			21	GND	G		6							
			22	+5V_LED	P		5							
			23	GND	G		4							
			24	+5V_LED	P		3							
			25	GND	G		2							
			26	+5V_LED	P		1							
			6	BCU	CN105		1		Paper Size Detect SW4	I	CN810	1	Paper Size Detection Switch	
							2		Paper Size Detect SW3	I		2		
3	GND	G					3							
4	Paper Size Detect SW2	I					4							
5	Paper Size Detect SW1	I					-							
6	Main Motor:Gain Switching	O				CN811	10	Main Motor						
7	Main Motor:Clock	O							9					
8	Main Motor:Brake	O							8					
9	Main Motor:CW/CCW	O							7					
10	Main Motor:Start	O							6					
11	Main Motor:Lock	I							5					
12	GND	G							4					
13	GND	G							3					
14	+24VS	P							2					
15	+24VS	P					1							
7	BCU	CN106	1	Paper Feed CL :+24VS	P	CN812	2	Paper Feed Clutch						
			2	Paper Feed CL :GND	O		1							
			3	Registration CL :+24VS	P	CN813	2	Registration Clutch						
			4	Registration CL :GND	O		1							
			5	Toner Supply CL :+24VS	P	CN818	2	Toner Supply Clutch						
			6	Toner Supply CL :GND	O		1							
			7	By-pass Feed CL :+24VS	P	CN816	2	By-pass Feed Clutch						
			8	By-pass Feed CL :GND	O		1							
			9	By-pass Bottom Plate CL :+24VS	P	CN817	2	By-pass Bottom Plate Clutch						
			10	By-pass Bottom Plate CL :GND	O		1							
			11	Duplex CL :+24VS	P	CN815	2	Duplex Clutch						
			12	Duplex CL :GND	O		1							
			13	Junction Gate SOL :+24VS	P	CN819	3	Junction Gate Solenoid						
			-	N.C.	-		2							
	Junction Gate SOL :GND	O		1										

Harness No.	Connector (From)			Signal Information	I/O	Connector (To)			Relay Harness	
	To Connector	Addr.	Pin No.			Addr.	Pin No.	To Connector		
9	BCU	CN108	1	N.C.(FGATE Signal for Inspection)	O		-			
			2	PCDU Cooling Fan	O	CN866	3	PCDU Cooling Fan		
			3	PCDU Cooling Fan: Detect	I		2			
			4	PCDU Cooling Fan: GND	G		1			
			5	Registration Sensor: GND	G	CN838	3	Registration Sensor	16	
			6	Registration Sensor	I		2			
			7	Registration Sensor: +5V	P		1			
			8	Duplex Entrance Sensor: GND	G	CN841	3	Duplex Entrance Sensor	17	
			9	Duplex Entrance Sensor	I		2			
			10	Duplex Entrance Sensor: +5V	P		1			
			11	Duplex Reverse Sensor: GND	G	CN844	3	Duplex Reverse Sensor		
			12	Duplex Reverse Sensor	I		2			
			13	Duplex Reverse Sensor: +5V	P		1			
			14	Envelope Lever SW: ON	G	CN845	2	Envelope Lever Detection Switch	11	
			15	Envelope Lever SW: GND	I		1			
			16	N.C.	P		-			
		CN111	1	N.C.(Fusing Fan)	O		-	Fusing Fan		
			2	N.C.(Fusing Fan: Cock Detect)	I		-			
			3	N.C.(Fusing Fan: GND)	G		-			
			4	Toner End Sensor: GND	G	CN834	4	Toner End Sensor	8	
			5	Toner End Sensor: Receiving	I		3			
			6	Toner End Sensor: GND	G		2			
			7	Toner End Sensor: Emitting	O		1			
			8	Paper Exit Sensor: GND	G	CN858	3	Paper Exit Sensor	3	
			9	Paper Exit Sensor	I		2			
			10	Paper Exit Sensor: +5V	P		1			
			11	Paper Overflow Sensor: GND	G	CN861	3	Paper Overflow Sensor		
			12	Paper Overflow Sensor	I		2			
			13	Paper Overflow Sensor: +5V	P		1			
			CN150	1	ID TAG: Data	B	CN885	4	ID TAG: Toner	22
				2	ID TAG: CLK	O		3		
				3	+3.3V ID	P		2		
4	GND	G			1					
5	PCDU ID TAG: Data	B		CN886	4	ID TAG: PCDU				
6	PCDU ID TAG: CLK	O			3					
7	+3.3V ID	P			2					
8	GND	G			1					
15	BCU	CN110	1	Fusing Set Detect	I	CN6	1	Fusing Drawer Connector		
			2	GND	G		2			
			3	Fusing New Detect	I		3			
			4	+24VS	P		4			
			-	-	-		5			
			-	-	-		6			
			5	Thermistor (Edge): FB	I	CN4	1	Fusing Drawer Connector		
			6	GND	G		2			
			7	Thermistor (Center): FB	I		3			
			8	GND	G		4			
			9	N.C.	N		-			
			1	HT-L		CN3	3	Fusing Drawer Connector		
	2	HT-N			2					
	20	BCU	CN204	1	GND	G	CN1	13	OPU	
				2	GND	G		12		
				3	State of Power Supply	I		11		
4				Notice of OFF or Shift to OFF	O		10			
5				Write Detect	I		9			
6				OPU OFF/ON CMD from CTL	O		8			
7				Request for State Transition of Energy Saver	I		7			
8				Power	P		6			
9				Type-0 OPU Receiving/Transmitting Data CLK	O		5			
10				Power	P		4			
11				Power	O		3			
12				Type-0 OPU Transmitting Data	P		2			
13				Type-0 OPU Receiving Data	I		1			
23				BCU	CN107	1	N.C.	N		
	2	N.C.	N				-			
	3	By-pass PE Sensor: GND	G			CN823	6	By-pass Paper End Sensor		
	4	By-pass PE Sensor	I				5			
	5	By-pass PE Sensor: +5V	P				4			
	6	By-pass Bottom HP Sensor: GND	G				3	By-pass Bottom Plate HP Sensor		
	7	By-pass Bottom HP Sensor	I				2			
	8	By-pass Bottom HP Sensor: +5V	P				1			
	9	PE Sensor: GND	G			CN829	3	Main Machine Paper End Sensor	12	
	10	PE Sensor	I				2			
	11	PE Sensor: +5V	P				1			
	12	Temp Humid Sensor: Temp.FB	I			CN835	4	Temp Humid Sensor		
	13	Temp Humid Sensor: GND	G				3			
	14	Temp Humid Sensor: Humid.FB	I				2			
	15	Temp Humid Sensor: +3.3V	P				1			
	16	N.C.	N				-			
	17	N.C.	G				-			

M187 ELECTRICAL COMPONENT LAYOUT



Symbol	Index No.	Description	P to P
Motors			
M1	Fig.2-3	Main Motor	B4
M2	Fig.4-1	PSU Cooling Fan	B8
M3	Fig.2-1	Exit/Reverse Motor	F2
M4	Fig.4-4	PCDU Cooling Fan	G8
Magnetic Clutches			
MC1	Fig.2-4	Registration Clutch	B2
MC2	Fig.2-9	Toner Supply Clutch	B2
MC3	Fig.2-5	Paper Feed Clutch	B2
MC4	Fig.2-8	By-pass Feed Clutch	B3
MC5	Fig.2-7	By-pass Bottom Plate Clutch	B3
MC6	Fig.2-2	Duplex Clutch	B3
MC7	Fig.2-6	Reray Clutch	B7
Sensors			
S1	-	ID TAG: Toner	H6
S2	-	ID TAG: PCDU	H6
S3	Fig.1-4	Paper Overflow Sensor	G6
S4	Fig.1-5	Paper Exit Sensor	H6
S5	Fig.4-8	Toner End Sensor	H7
S6	Fig.1-3	Duplex Entrance Sensor	H8
S7	Fig.1-4	Duplex Reverse sensor	G8
S8	Fig.1-12	Registration Sensor	H9
S9	Fig.1-10	Main Machine Paper End Sensor	H9
S10	Fig.1-9	By-pass Bottom Plate HP Sensor	H9
S11	Fig.1-11	By-pass Paper End Sensor	H9
S12	Fig.1-7	Temp Humid Sensor	G10

Symbol	Index No.	Description	P to P
Switches			
SW1	Fig.1-8	Paper Size Detection Switch	B4
SW2	Fig.1-13	DC Switch	B8
SW3	Fig.1-1	Rear Door Interlock Switch	B8
SW4	Fig.1-14	Front Door Interlock Switch	B8
SW5	Fig.1-2	Envelope Lever Detection Switch	H7
Solenoids			
SOL1	Fig.3-1	Junction Gate Solenoid	B3
PCBs			
PCB1	Fig.4-5	BCU	D5
PCB2	Fig.4-7	HVPS	C6
PCB3	Fig.4-2	OPU	A10
PCB4	Fig.4-3	Controller Board	C11
PCB5	Fig.4-6	PSU	G3
Thermistors			
TH1	Fig.3-5	Fusing Thermister (Center)	H5
TH2	Fig.3-6	Fusing Thermister (Edge)	H5
Thermostats			
TS1	Fig.3-4	Thermostat	-
Lamps			
L1	Fig.3-3	Fusing Lamp	G4
Others			
-	Fig.3-2	LEDA	F11