

M199/M200 Point To Point DIAGRAM and Harnesses

Legend:

- Orange box: CN - CT
- Yellow box: CN - mini CT
- Green box: CN - Mi II
- Blue box: CN - mini Mi II
- Red box: CN - CZ
- Blue box: CN - Drawer
- Dark blue box: CN - Externa I/F
- Black box: CN - B to B
- Purple box: CN - Others
- Red box: n - harness No.
- Green box: Board
- Blue box: Unit
- Orange box: Option
- Red dashed line: Harness
- White box: electrical component

High Voltage Power Supply Board Output Table:

Charge Development	1st Img. Tran	2nd Img. Tran		
Output Num	4	4	1	1
Pole Num	-	±	±	±

Diagram Details:

- Controller Board:** Central component connecting to various boards.
- EGB (Engine Board):** Connects to LSU, Fusing Unit, and PSU.
- PSU (Power Supply Unit):** Provides power to the printer.
- LSU (Laser Scanning Unit):** Includes Polygon Motor, Synchronizing Detector Board, LDB[K,Y], and LDB[M,C].
- Fusing Unit:** Includes Fusing Stripper Pawl Solenoid, Paper End Sensor, Registration Sensor, Paper Exit Sensor, ITB (Image Transfer Belt) Contact Motor, ITB (Image Transfer Belt) Contact Sensor, Agitator Motor, Temperature/Humidity Sensor, and Fusing Pressure Release Sensor.
- ID Chip Board [K,Y,M,C]:** Includes ID Chip [K], ID Chip [Y], ID Chip [M], and ID Chip [C].
- Waste Toner Overflow Sensor and Waste Toner Bottle Set Sensor:** Monitor toner levels.
- DEBUG MONITOR:** For troubleshooting.
- Optional Tray:** Includes Optional Tray Paper Clutch, Optional Tray Relay Clutch, Optional Paper End Sensor, Optional Set Detector, and Optional Relay Sensor.
- Power Cord:** 1150042(XNA), 1150045(XEU), 1150046(XCHN), 1150049(XTWN).

M199/M200 Entire Pin Assignment List

Harness	Connector(FROM)				Signal Information				Relay Harness	Connector(TO)						
	No.	Access Point No.	Destination	Pin	Signal Name	Direction	L	H		No.	Access Point No.	Destination	Pin			
G1665400	CN1	CN301	EGB M2025125	1	+24V					CN2	CN	Polygon Motor GX060025	5			
				2	GND								4			
				3	A PMON	→	Start	Stop					3			
				4	SCRDY_N	←	Synchro	Not Synchro					2			
				5	A PMCLK	→					CN3	CN	Synchronizing Detector Board G1665270	1		
				6	A DETP_N.KC	←				3						
				7	+5V					2						
				8	GND					1						
G1665456	CN1	CN302	EGB M2025125	1	GND					CN3	CN	LDB[K,Y] G1665263	16			
				2	GND								15			
				3	GND								14			
				4	A LDLVL2_Y	→							13			
				5	A LDLVL0_K	→							12			
				6	A LDERR_N	←	Normal	Trouble					11			
				7	LDOFF2_Y	→							10			
				8	LDOFF0_K	→							9			
				9	APC2EN_N.Y	→							8			
				10	APC0EN_N.K	→							7			
				11	LDDT0_K	→							6			
				12	LDDT0_N.K	→							5			
				13	-											
				14	LDDT2_Y	→							4			
				15	LDDT2_N.Y	→							3			
				16	-											
				17	+5V LD								2			
				18	+5V LD								1			
	CN2	CN303		1	GND					CN4	CN	LDB[M,C] G1665265	16			
				2	GND								15			
				3	GND								14			
				4	A LDLVL1_M	→							13			
				5	A LDLVL3_C	→							12			
				6	A LDERR_N	←	Normal	Trouble					11			
				7	LDOFF1_M	→							10			
				8	LDOFF3_C	→							9			
				9	APC1EN_N.M	→							8			
				10	APC3EN_N.C	→							7			
				11	LDDT3_C	→							6			
				12	LDDT3_N.C	→							5			
				13	LDDT1_M	→							4			
				14	LDDT1_N.M	→							3			
				15	-											
				16	+5V LD								2			
				17	+5V LD								1			
M2025408	CN1	CN324	EGB M2025125	1	+24V_IL					CN2		Fusing Stripper Pawl Solenoid GX100001	1			
				2	A_SOL_FU.P	→	ON	OFF					2			
				CN10	CN314		1	GND					CN20		Paper End Sensor AW020198	3
							2	A_SEN.PAPEND_N	←	Detect Paper	NOT Detect					2
	3	+5V									1					
	CN100	CN317					4	GND					CN30		Registration Sensor AW020198	3
				5	A_SEN.REG_N	←	Detect Paper	NOT Detect		2						
				6	+5V					1						
				CN1000	CN308		7	GND					CN40		Paper Exit Sensor AW020198	3
	8	A_SEN.PAPOUT_N					←	Detect Paper	NOT Detect		2					
	9	+5V									1					
	CN10000	CN326					1	A_DM_1TCSPCCW	→				CN200		ITB (Image Transfer Belt) Contact Motor GX040024	1
				2	A_DM_1TCSPCW	→				2						
				3	GND					CN300		ITB (Image Transfer Belt) Contact Sensor AW020198	3			
				4	A_SEN_1TCSP	←	Separate	Attach					2			
	5	+5V						1								
	CN10000	CN308		6	A_DM.TONER.P	→	ON	OFF		CN400		Agitator Motor GX040023	1			
7				+24V_IL.FU1					2							
CN10000				CN326		1	A_SEN.TEMP.A	←				CN2000		Temperature/Humidity Sensor AW140015	4	
						2	GND								3	
	3	A_SEN.HUM.A	←						2							
	4	+5V							1							
CN10000	CN326		1	GND					CN20000		Fusing Pressure Release Sensor AW020198	3				
			2	A_SEN.TRSET.P	←	Release	Normal					2				
			3	+5V								1				
M2025405	CN1	CN316	EGB M2025125	1	GND					CN2	CN	High Voltage Power Supply Board GZ300004	16			
				2	GND								15			
				3	+24V_IL								14			
				4	+24V_IL								13			
				5	A.HVPERR.N	←	SC						12			
				6	A.HVPERR2	←							11			
				7	HVPBION_N	→	ON	OFF					10			
				8	PWM_2T_+	→							9			
				9	PWM_2T_-	→							8			
				10	PWM_1T	→							7			
				11	PWM_DC	→							6			
				12	PWM_DM	→							5			
				13	PWM_DY	→							4			
				14	PWM_DK	→							3			
				15	PWM_CCMY	→							2			
				16	PWM_CK	→							1			
				17	GND											
M2025403	CN1	CN305	EGB M2025125	1	GND					CN2	CN700	ID Chip Board G1665280	4			
				2	A.SDA	←→							3			
				3	A.SCL	→							2			
				4	+5V.ID								1			
				5	-											
M2025402	CN1	CN315	EGB M2025125	1	GND					CN2		Waste Toner Overflow Sensor G1666584	3			
				2	A_SEN.TONERFULL.P	←		Full					2			
				3	+5V								1			
				4	GND					CN3		Waste Toner Bottle Set Sensor AW020198	3			
				5	A_SEN.TONERBTL.N	←	Set	NOT Set					2			
				6	+5V								1			

M199/M200 Entire Pin Assignment List

Harness	Connector(FROM)			Signal Information				Relay Harness	Connector(TO)								
	No.	Access Point No.	Destination	Pibn	Signal Name	Direction	L		H	No.	Access Point No.	Destination	Pin				
M1985400	CN1	CN313	EGB M2025125	1	A SM DUPA P	→				CN2		Duplex Motor GX041120	6				
				2	+24V SM	→							5				
				3	A SM DUPAB P	→							4				
				4	A SM DUPB P	→							3				
				5	+24V SM	→							2				
				6	A SM DUPBB P	→							1				
	CN10	CON2	CTL A, C Model M2005653 L, B Model M1985653	1	GND					M1985401	CN20	CN1	OPU Main Board M0961466	16			
				2	+5VC									15			
				3	SW2 N	→								14			
				4	SW1 N	→								13			
				5	DI LED	→								12			
				6	ALT_R LED	→								11			
				7	BL	→								10			
				8	DB7	↔								9			
				9	DB6	↔								8			
				10	DB5	↔								7			
M2025401	CN1	CN306	EGB M2025125	11	DB4	↔							6				
				12	E	→					5						
				13	RS	→					4						
				14	+3.3VC	→					3						
				15	ALT_Y LED	→					2						
				16	GND						1						
				1	A SEN TM1PWM	→					CN2	CN	TM Sensor Board G1666174	9			
				2	A SEN TM1R A	←								8			
				3	A SEN TM3CR A	←								7			
				4	+5V									6			
5	A SEN TM3PWM	→					5										
6	A SEN TM3CD A	←					4										
M2025404	CN1	CN321	EGB M2025125	7	A SEN TM2L A	←							3				
				8	A SEN TM2PWM	→						2					
				9	A FAN MIN	→						1					
				2	A FAN MINLOCK P	←	Normal	Trouble			CN2		Fusing Fan AX640199	2			
				3	GND									3			
				4	A FAN FU	→											
M2025410	CN1	CN309	EGB M2025125	5	A FAN FULOCK P	←	Normal	Trouble		CN3		LSU Fan AX640199	2				
				6	GND									3			
				1	A DM COLGAIN	→	Low Speed	High Speed					CN2	CN	Color AIO Motor GX061150	11	
				2	A DM COLCLK	→					10						
				3	A DM COLON N	→	Start	Stop			9						
				4	A DM COLLOCK P	←	Normal	Trouble			8						
				5	GND						7						
				6	GND						6						
				7	+24V IL						5						
				8	+24V IL						4						
				9	+24V IL						3						
				10	GND						2						
				11	A DM BWMIDGAIN	→	Low Speed	High Speed		CN3	CN	Black AIO Motor GX061149	10				
				12	A DM BWMIDCLK	→								9			
				13	A DM BWMIDBK P	→		Brake						8			
				14	A DM BWMIDCW	→	Normal Rotation	Reverse Rotation						7			
				15	A DM BWMIDON N	→	Start	Stop						6			
				16	A DM BWMIDLOCK P	←	Normal	Trouble						5			
				17	GND									4			
				18	GND									3			
	19	+24V IL						2									
	20	+24V IL						1									
	CN10	CN311		1	A DM FEEDFUGAIN	→	Low Speed	High Speed		CN20	CN	Transport/Fusing Motor GX061148	8				
				2	A DM FEEDFUCK	→								7			
				3	A DM FEEDFUON N	→	Start	Stop						6			
				4	A DM FEEDFULOCK P	←	Normal	Trouble						5			
				5	GND									4			
				6	GND									3			
				7	+24V IL									2			
				8	+24V IL									1			
				9	+24V IL						CN30		Paper Feed Clutch GX201123	1			
				10	A CL PAP P	→	ON	OFF						2			
				11	+24V IL												
12				A CL REG_P	→	ON	OFF			CN40					Registration Clutch GX201123	1	
1				A CL OPPAP P	→	ON	OFF									2	
CN100	CN312		2	+24V_IL_FU2					CN200		Optional Tray G84927	10					
			3	GND									9				
			4	A_SEN_OPPAPEND_N	←	Not Detect	Detect Paper						8				
			5	+5V									7				
			6	A_CL_OPFEED_P	→	ON	OFF						6				
			7	+24V_IL_FU2									5				
			8	A_SEN_OPSET_N	←	Set	NOT Set						4				
			9	A_SEN_OPJAM_P	←	Not Detect	Detect Paper						3				
			10	+5V									2				
			M2025406	CN1	CN320	EGB M2025125	1	GND								CN2	CN220
2	GND										11						
3	GND										10						
4	+24V_IL										9						
5	+24V_IL										8						
6	+24V_IL										7						
7	GND										6						
8	+5V										5						
9	GND										4						
10	+3.3VE										3						
11	GND										2						
12	+5VE										1						
CN10	CN304			1	+5V_LD					CN20	CN204		4				
				2	GND									3			
				3	+24V									2			
				4	GND									1			
				1	A_SLP_PSU	→								CN200	CN219		5
				2	HTRLO_N_P	→											4
3	A_ZEROXI	←						3									
4	HTRRONO_P	→						2									
CN100	CN319			5	GND							1					

M199/M200 Entire Pin Assignment List

Harness	Connector(FROM)				Signal Information				Relay Harness	Connector(TO)			
	No.	Access Point No.	Destination	Pibn	Signal Name	Direction	L	H		No.	Access Point No.	Destination	Pin
M2025407	CN1	CN307	EGB M2025125	1	A.TH. HEAT_A	←				CN2	CN	Fusing Unit M0964017(NA) M0964019(TWN) M0964027(EU)	4
				2	GND								3
				3	A.TH. EDGE_A	←							2
				4	GND								1
				5	A.SEN.FUSET_N	←							
				6	GND								
				7	A.SEN.FUNEW_N	←							
				8	GND								
M2025414	T	T101	PSU GZ230081(NA/TWN) GZ230082(EU/AA) GZ230083(CHN)	T101	AC-L					T		MAIN SW 12042757	
	T	T102		T102	AC-N					T			
M2025409			MAIN SW 12042757		AC-L							Inlet 1005099	
					AC-N								
M2025413	CN221	CN1	PSU GZ230081(NA/TWN) GZ230082(EU/AA) GZ230083(CHN)	1	+5.1V(LPS Compatible)					CN2		Interlock SW 12042612	1
										CN3			2
				2	+5.1V(LPS Compatible, Via IL)					CN4		Interlock SW 12042612	1
				3	+24V								2
M1005405 (NA/TWN) G1665446 (EU/AA/CHN)	CN1	CN101	PSU GZ230081(NA/TWN) GZ230082(EU/AA) GZ230083(CHN)	1	AC-L					CN1	CN1	Fusing Unit M0964017(NA) M0964019(TWN) M0964027(EU)	1
				2	AC-N								2
M2025415	CN1	J-WIFI1	CTL A, C Model M2005653 L, B Model M1985653	1	PDN	←				CN	CN	Wi-Fi Board M2025001	2
				2	3.3V								6
				3	HS DM	↔							4
				4	HS DP	↔							3
				5	GND								1
B TO B		CN300	EGB M2025125	1	HSYNC_N	→					J-ENG1	Controller Board A, C Model M2005653 L, B Model M1985653	1
				2	LGATE_N	←							2
				3	GND								3
				4	PCLK	←							4
				5	GND								5
				6	PODAT0_N_K	←							6
				7	PODAT2_N_K	←							7
				8	PODAT3_N_K	←							8
				9	PIDAT1_N_M	←							9
				10	PIDAT2_N_M	←							10
				11	PIDAT3_N_M	←							11
				12	P2DAT0_N_Y	←							12
				13	P2DAT2_N_Y	←							13
				14	P2DAT3_N_Y	←							14
				15	P3DAT1_N_C	←							15
				16	P3DAT2_N_C	←							16
				17	P3DAT3_N_C	←							17
				18	VP1FGATE_N_M	→							18
				19	VP2FGATE_N_Y	→							19
				20	PREQ_N	←							20
				21	IREADY_N	→							21
				22	COMMAND	←							22
				23	STATUS	→							23
				24	3.3VE								24
				25	3.3VE								25
				26	GND								26
				27	GND								27
				28	GND								28
				29	GND								29
				30	GND								30
				31	GND								31
				32	PODAT1_N_K	←							32
				33	GND								33
				34	PIDAT0_N_M	←							34
				35	GND								35
				36	GND								36
				37	GND								37
				38	P2DAT1_N_Y	←							38
				39	GND								39
				40	P3DAT0_N_C	←							40
				41	PON	→							41
				42	FUKKI	←							42
				43	VP0FGATE_N_K	→							43
				44	VP3FGATE_N_C	→							44
				45	SLP_N	←							45
				46	ENGRDY	→							46
				47	5VE								47
				48	3.3VE								48
				49	5VE								49
				50	3.3VE								50
External I/F		J-NET1	CTL A, C Model M2005653 L, B Model M1985653	1	TX+	→						10/100 NETWORK	1
				2	TX-	→							2
				3	RX-	←							3
				4	NC(GND)								4
				5	NC(GND)	→							5
				6	RX+	←							6
				7	NC(GND)								7
				8	NC(GND)								8
				9	G.LED-								
				10	G.LED+								
				11	Y.LED-								
				12	Y.LED+								
External I/F		J-USB1	CTL A, C Model M2005653 L, B Model M1985653	1	VBUS							USB DEVICE	1
				2	Data-	↔							2
				3	Data+	↔							3
				4	GND								4
External I/F		CON1	CTL A, C Model M2005653 L, B Model M1985653	1	VBUS							USB HOST	1
				2	Data-	↔							2
				3	Data+	↔							3
				4	GND								4

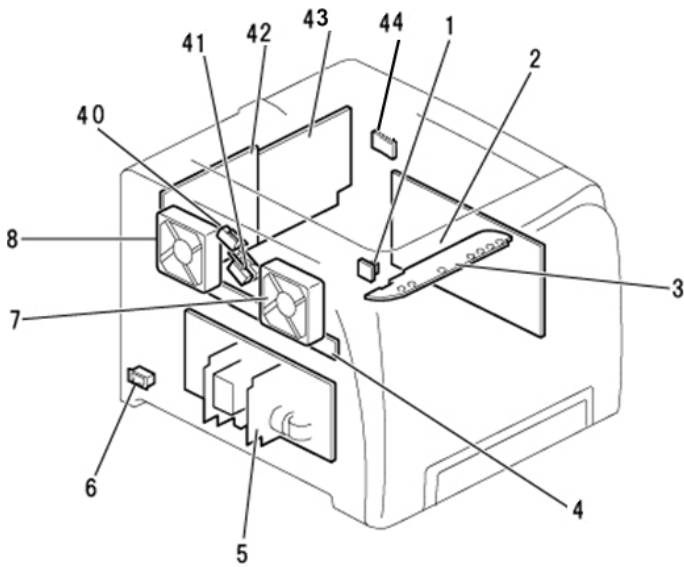
PRINTER(M199/ M200) ELECTRICAL COMPONENT LAYOUT

Printer (M199 / M200)

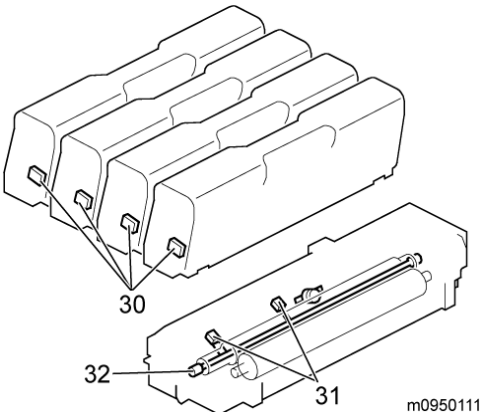
Symbol	Index No.	Description	P to P
Motors			
M1	17	Duplex	C3
M2	8	LSU Fan	C4
M3	7	Fusing Fan	C4
M4	22	Color AIO	D5
M5	21	Black AIO	D5
M6	18	Transport/Fusing	C5
M7	13	Polygon	G4
M8	14	ITB Contact	G7
M9	16	Agitator	G7
Magnetic Clutches			
CL1	19	Registration	C6
CL2	20	Paper Feed	C6
Switches			
SW1	6	Main	C8
SW2	40,41	Interlock	B9
Sensors			
S1	23	Waste Toner Overflow	G10
S2	24	Waste Toner Bottle Set	G10
S3	1	Temperature/Humidity	G7
S4	29	Paper End	G6
S5	28	Registration	G6
S6	26	Fusing Pressure Release	G8
S7	27	Paper Exit	G6
S8	25	ITB Contact	G7
PCBs			
PCB1	3,33	OPU Main Board	C2
PCB2	35,43	Controller Board (CTL)	F1-3
PCB3	30	ID Chip[K,Y,M,C]	G9
PCB4	4	ID Chip Connecting Board [K,Y,M,C]	G9
PCB5	9	TM Sensor Board	D4
PCB6	5	Power Supply Board (PSU)	D8-10
PCB7	34,42	Engine Board (EGB)	E3-10
PCB8	10	LD Board [M,C]	G5
PCB9	11	LD Board [K,Y]	G5
PCB10	12	Synchronizing Detector Board	G4
PCB11	2	High Voltage Power Supply Board (HVP)	GH8
PCB12	44	Wi-Fi Board	H3
Lamp			
L1	32	Fusing	AB8
Others			
SOL1	15	Fusing Stripper Pawl Solenoid	G6
TH1	31	Thermistors	B10

Feed Unit (G849)

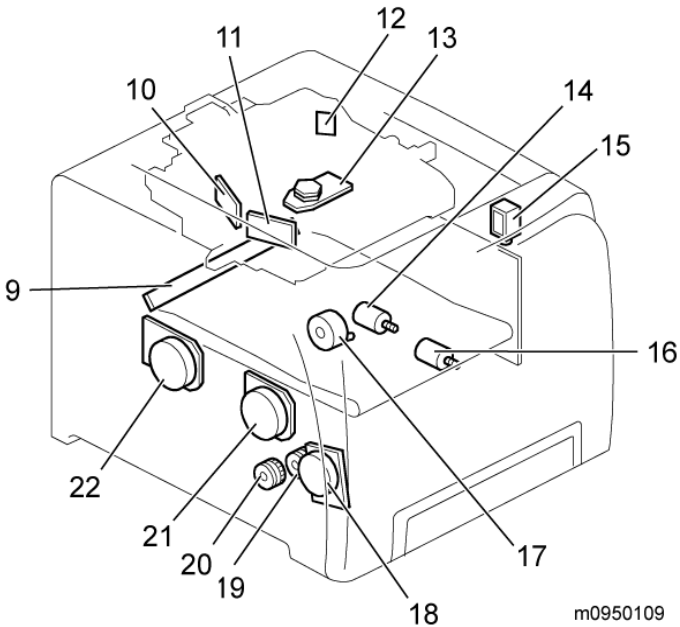
Symbol	Index No.	Description	P to P
Sensors			
S1	36	Paper End Sensor	C7
S2	37	Relay Sensor	C7
Magnetic Clutches			
MC1	39	Paper Clutch	C6
MC2	38	Relay Clutch	C7



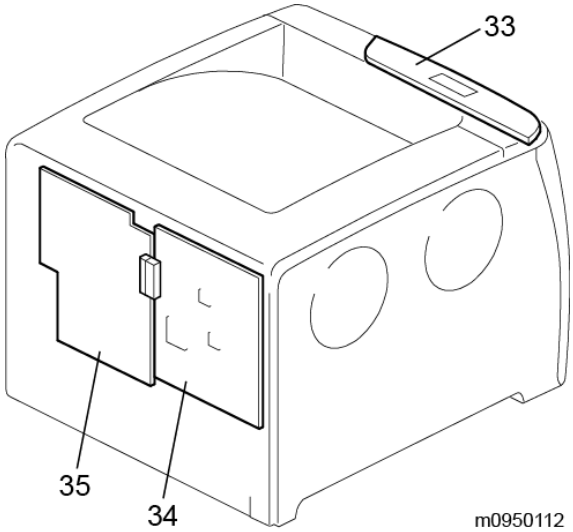
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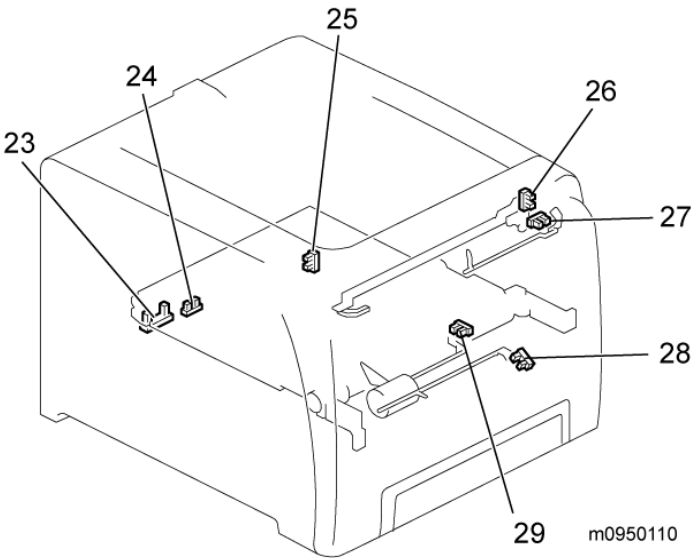
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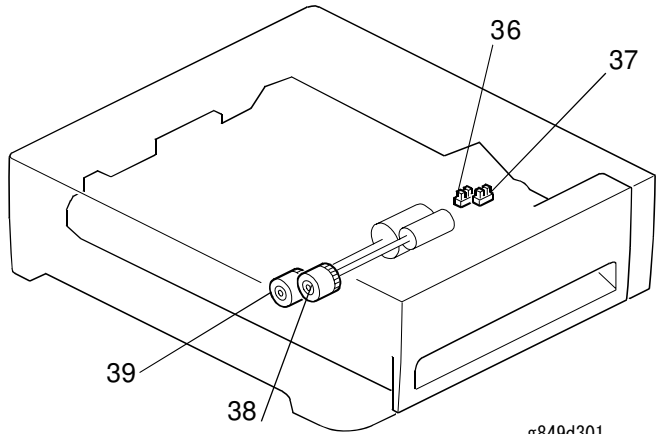
m0950109



m0950112



m0950110



g849d301