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Introduction

This section contains sensor, connector, and PWB location drawings; power distribution diagrams, interconnect diagrams and pin assignment information. This information is not specific to individual procedures but is provided for general reference.

Base Engine

Wiring Diagrams and Signal Information for Engine

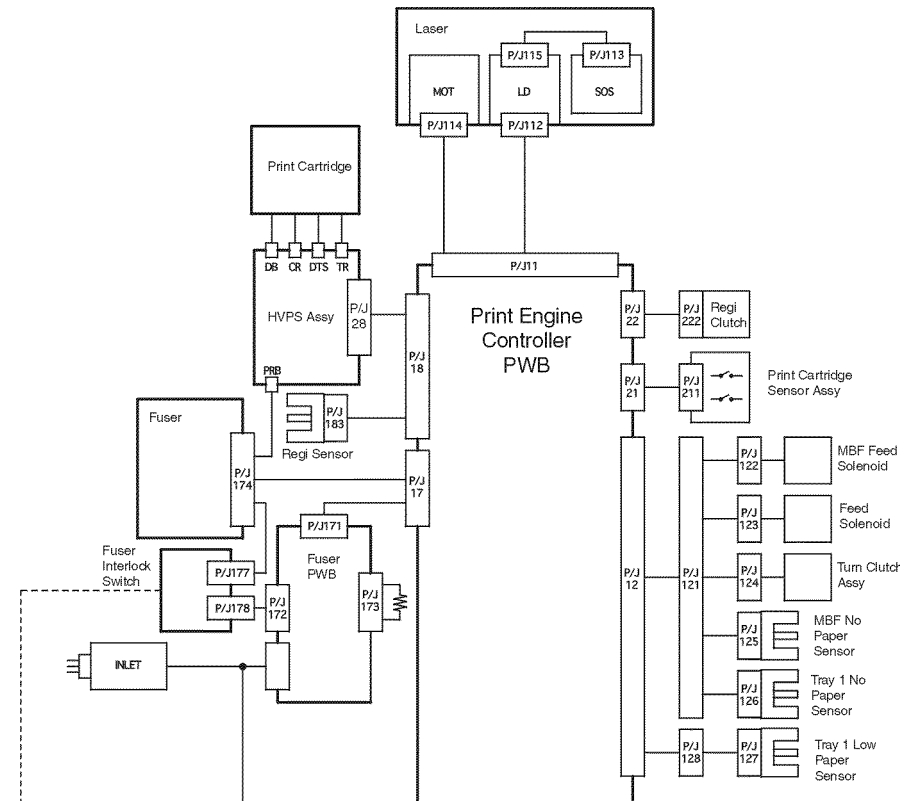
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Wiring and Signal Description between Components

Organization

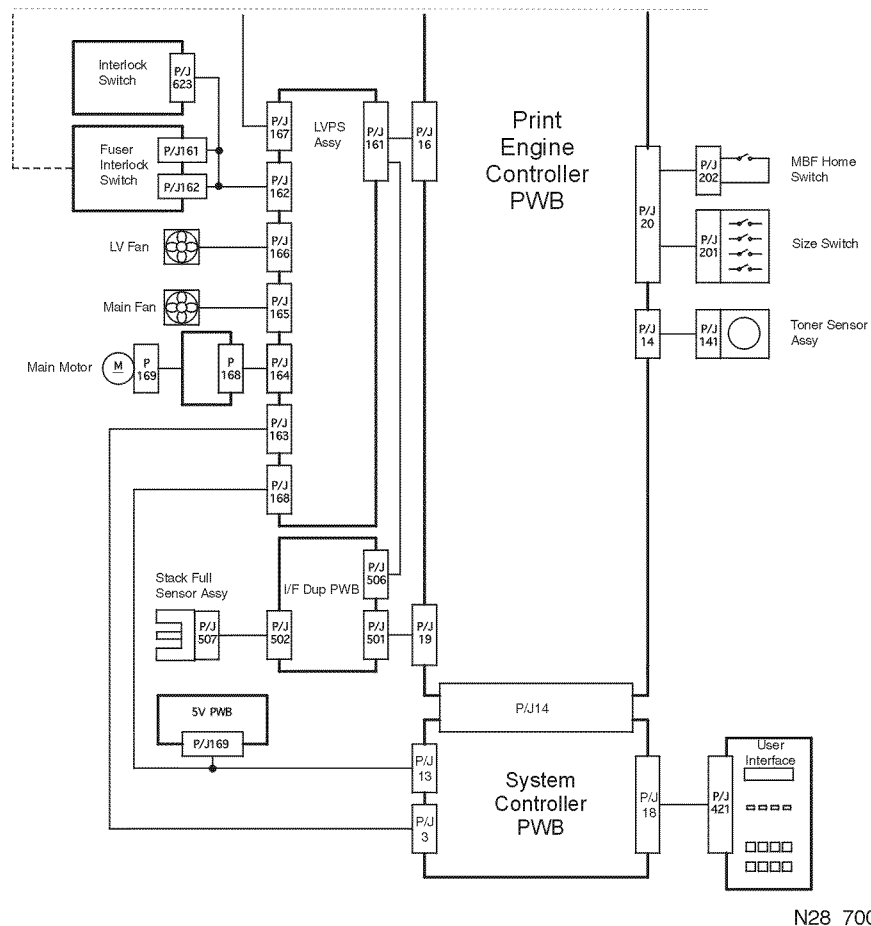
1. Print Engine Controller PWB<-->LVPS<-->INTER-LOCK SWITCH and FANs (Figure 3, Table 1, Table 2)
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5. Print Engine Controller PWB<-->REG. CLUTCH and REG. SENSOR (Figure 8, Table 8)
6. Print Engine Controller PWB<-->FEED SOLENOID, TURN CLUTCH, NO-PAPER SENSOR (Figure 9, Table 9, Table 10)
7. Print Engine Controller PWB<-->Low Paper SENSOR, P/H UNIT, TRAY 1 PAPER SIZE SWITCH (Figure 10, Table 11, Table 12)
8. Print Engine Controller PWB<-->MAIN MOTOR (Figure 11, Table 13)
9. Print Engine Controller PWB<-->TONER SENSOR (Figure 12, Table 14)
10. Print Engine Controller PWB<-->Duplex Interface PWB<-->FULL STACK SENSOR (Figure 13, Table 15)
11. CONTROLLER<-->Control Panel (Figure 14)
12. Print Engine Controller PWB<-->DIAGNOSTIC TOOL

Master Wiring Diagram



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Figure 1 Master Wiring Diagram (1 of 2)



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Figure 2 Master Wiring Diagram (2 of 2)

NOTE: *1: The Duplex Interface PWB and the components connected to it by means of P/J503, P/J504, and P/J505 are the components of the Duplex Assembly and OCT.

Wiring and Signal Description between Components




The Master Wiring Diagram is divided into the following 12 sections. The signal names, pin numbers, and other information are given in detailed diagrams by sections.

Organization

1. Print Engine Controller PWB<-->LVPS<-->INTER-LOCK SWITCH and FANS
2. Print Engine Controller PWB<-->FUSER ASSEMBLY, FUSER PWB

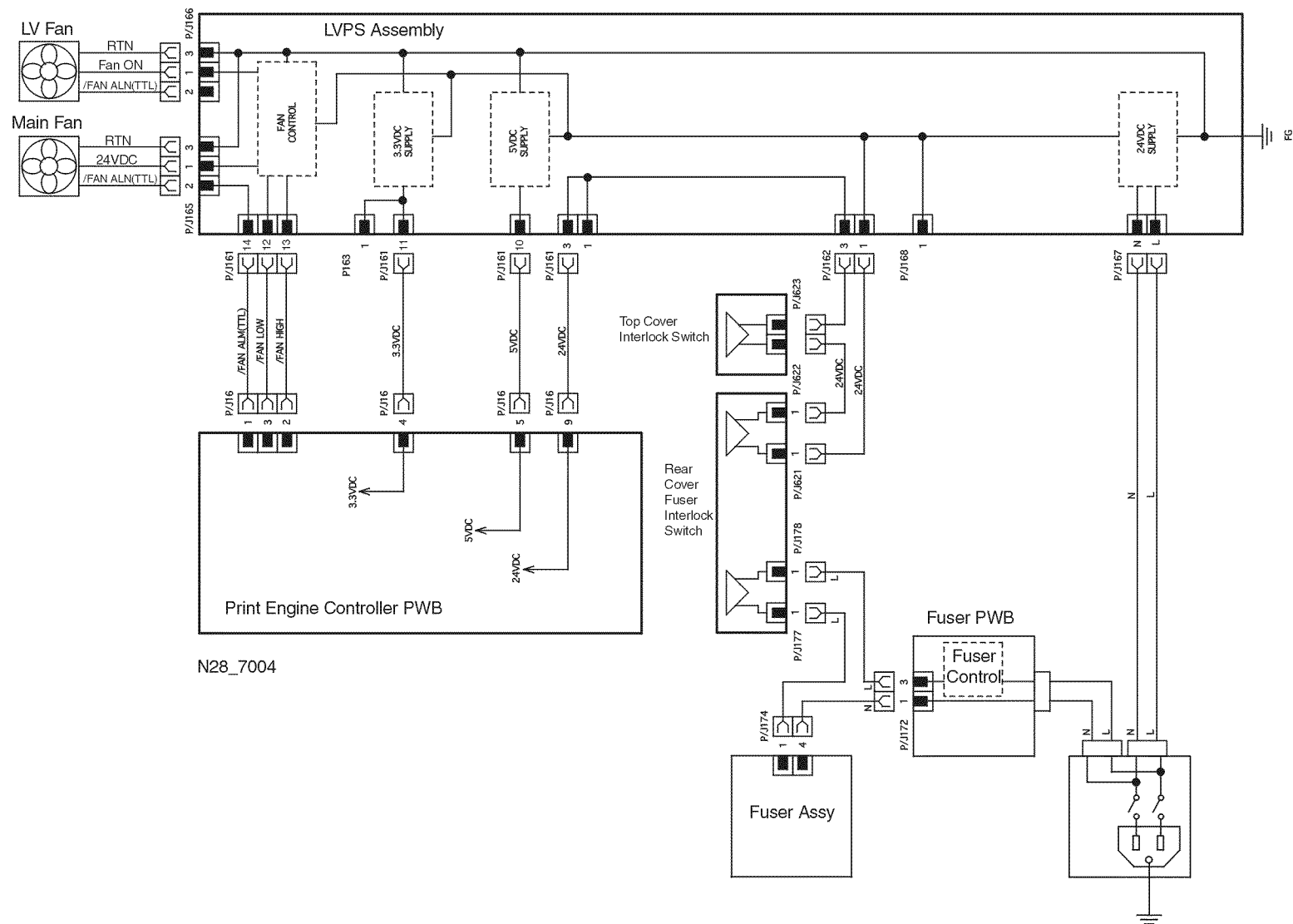
3. Print Engine Controller PWB<-->Laser and Print Cartridge SENSOR ASSEMBLY (Print Cartridge SWITCH and LD SWITCH)
4. Print Engine Controller PWB<-->HVPS<-->Print Cartridge (BCR and MAG. ROLL), BTR, and DETACK SAW
5. Print Engine Controller PWB <--> REG. CLUTCH and REG. SENSOR
6. Print Engine Controller PWB <--> FEED SOLENOID, TURN CLUTCH, NO-PAPER SENSOR
7. Print Engine Controller PWB <--> LOW PAPER SENSOR, P/H UNIT, TRAY 1 PAPER SIZE SWITCH
8. Print Engine Controller PWB <--> MAIN MOTOR
9. Print Engine Controller PWB <--> TONER SENSOR
10. Print Engine Controller PWB <--> Duplex Interface PWB <--> FULL STACK SENSOR
11. CONTROLLER <--> Control Panel
12. Print Engine Controller PWB <--> DIAGNOSTIC TOOL

Wiring Diagram Notations

Symbols	Description
	A plug
	A jack
	P/J Plug/Jack Connector
<u>5VDC</u>	5VDC supply circuit
<u>24VDC</u>	24VDC supply circuit
<u>/HEAT (TTL)</u>	<p>“/” indicates that the signal is a negative logic signal and goes Low when it is ON.</p> <p>“TTL” indicates that the voltage level of the signal is TTL compatible.</p> <p>High: 4 to 5 VDC</p> <p>Low: 0 to 0.8 VDC</p>
<u>/FAN FAST ON(L) xx VDC</u>	<p>“ON(L)” indicates that the signal goes Low when it is ON.</p> <p>“Xx VDC” indicates the voltage when the signal is High.</p>
SG FG RTN	<p>Signal Ground Frame Ground Return</p> <p>* There is continuity between SG and RTN. Continuity between SG and FG depends on the circuit specifications.</p>

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1.Print Engine Controller PWB<-->LVPS<-->INTER-LOCK SWITCH and FANS



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Figure 3 Printer Engine Controller PWB - LVPS - Interlock Switches and Fans

Table 1 Signal names for the Print Engine Controller PWB<-->LVPS path

Signal Name	Description
/FAN ALM (TTL)	Fan monitor signal. Goes High when the rotation of the Main Fan and LVPS Fan is abnormal.

Table 1 Signal names for the Print Engine Controller PWB<-->LVPS path

Signal Name	Description
/FAN LOW ON(L) 24V	Fan speed switching signal that switches the speed of rotation of the Fuser Fan and LVPS Fan between High and Low: Low speed, High: High speed
/FAN HIGH ON(L) 24V	Fan speed switching signal that switches the speed of rotation of the Fuser Fan and LVPS Fan between High and Low: High speed, High: Low speed

Table 2 Signal names for the LVPS<-->Fuser Fan/Main Fan path

Signal Name	Description
FAN ON	Fan drive power that drives the Fuser Fan and LVPS Fan with two voltages, 24V for High speed and 15V for Low speed
/FAN ALM (TTL)	Fan monitor signal. Goes Low when the rotation of the Fuser Fan or LVPS Fan is abnormal

• 24VDC Supply Interruption by the Interlock Switch when the Rear Cover, Top Cover, OCT Rear Cover, or the 2000 Sheet Feeder Rear Cover is open, the Interlock Switch is deactuated to open the 24 VDC supply circuit between the LVPS and the Print Engine Controller PWB. As the result, 24 VDC supply to the Print Engine Controller PWB, and hence Motors, Clutches, and Solenoids are stopped. However, the Fans are always supplied with 24 VDC without being interrupted by the deactuation of the Interlock Switch.

2. Print Engine Controller PWB<-->FUSER ASSEMBLY, FUSER PWB

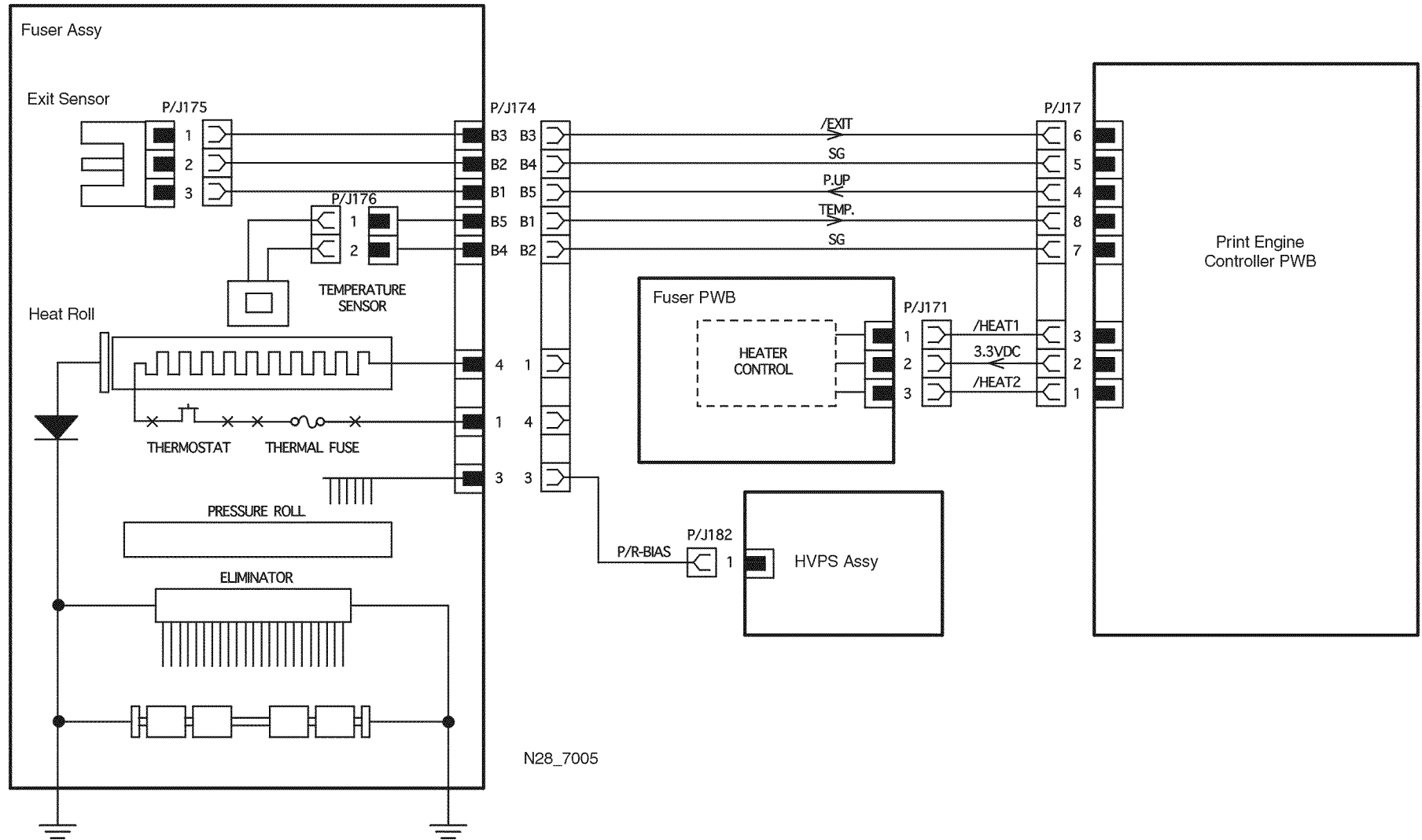


Figure 4 Print Engine Controller PWB-Fuser Assembly, Fuser PWB

Table 3 Pin numbers and voltage levels for the Print Engine Controller PWB <--> Fuser Assembly path

Signal Name	Description
/EXIT (TTL)	Signal from the Exit Sensor. This signal is Low when the Exit Sensor is actuated.
TEMP	Temperature monitor signal (analog signal) from the Temperature Sensor Assembly (Thermistor) that indicates the temperature of the Heat Roll surface

Table 4 Signal names for the Print Engine Controller PWB <--> Fuser PWB path

Signal Name	Description
/HEAT 1(TTL)	Fuser control signal to switch AC power to the Heater Rod on and off Low: On, High: Off
/HEAT 2(TTL)	Fuser control signal to switch AC power to the Heater Rod on and off Low: On, High: Off

Thermal Fuse melting point	Specified temperature = 141 C							
Thermostat contacts opening temperature	Temperature of the contacts = approx. 160 C							
Heater Rod rated power	100V version: 760 +/- 38 W (100V) 220V version:							
Resistance of the Thermistor of Temperature Sensor Assembly.	C	10	20	30	160	170	180	190
	k Ω	647.0	483.3	302.3	10.1	8.4	7.0	5.9

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Figure 5 Fuse, Thermostat, Heater Rod, and Thermistor specifications

3. Print Engine Controller PWB<-->Laser and Print Cartridge SENSOR ASSEMBLY (Print Cartridge SWITCH and LD SWITCH)

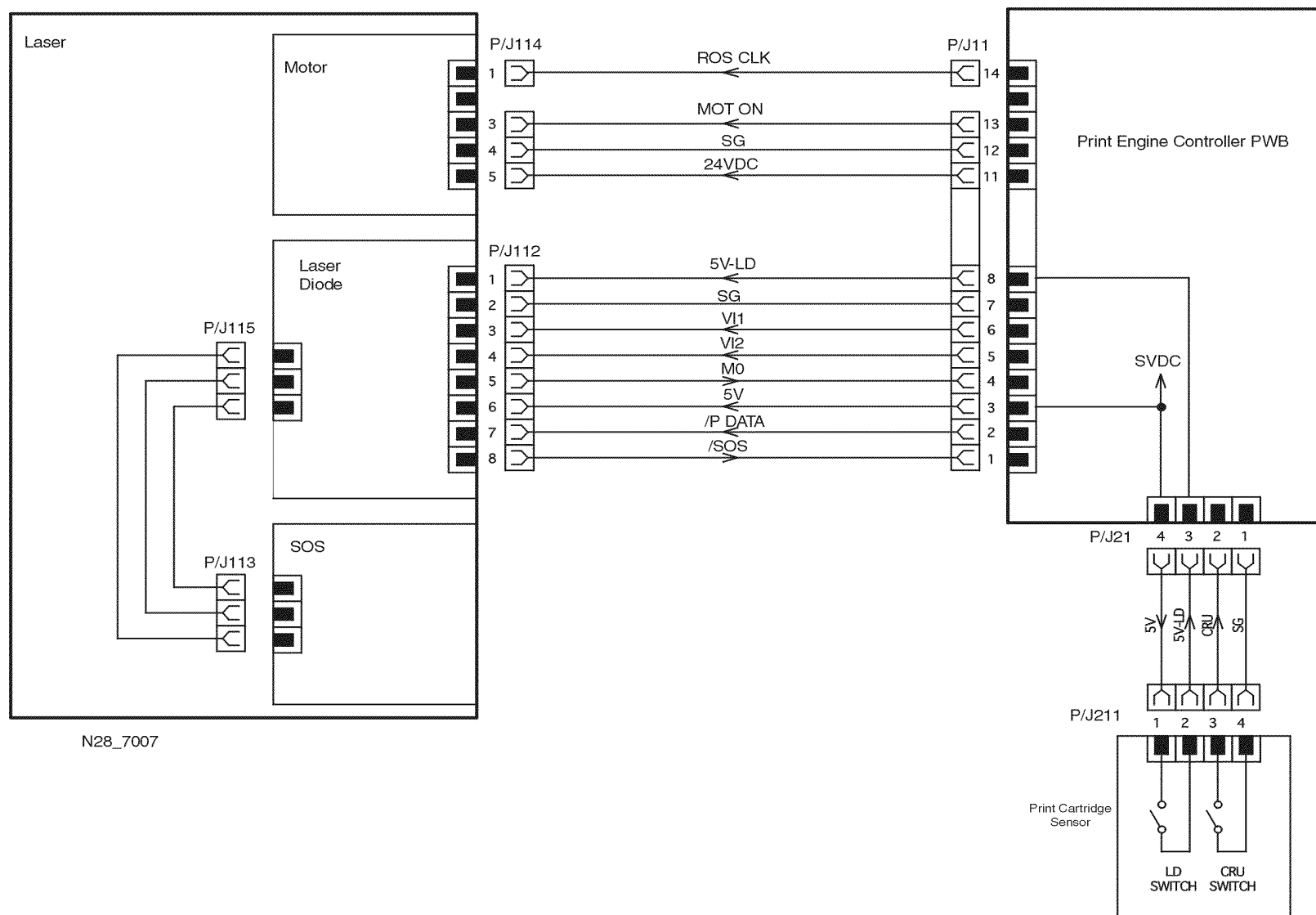


Figure 6 Print Engine Controller PWB-Laser and Print Cartridge Sensor Assembly (Print Cartridge Switch and LD Switch)

Table 5 Signal names for the Print Engine Controller PWB<-->Laser path

Signal Name	Description
/Laser CLK	Clock signal to Laser MOTOR
/MOT ON (TTL)	Scanner Motor Control signal that switches the Scanner Motor on and off Low: On, High: Off
5VDC-LD	Laser Diode drive power causing the Laser Diode to emit laser light. This 5VDC supply to the Laser Diode is interrupted by the deactuation of the LD Switch in the Print Cartridge Sensor assembly.
VL1	Laser power control signal that determines (or adjusts) the current flowing through the Laser Diode (analog signal)
VL2	Laser power control signal that determines (or adjusts) the current flowing through the Laser Diode (analog signal)
MO	Laser power monitor signal that feeds back the power of the laser light emitted by the Laser Diode (analog signal)
/P. DATA (TTL)	Print image data (Low=Black dot, High=White dot)
/SOS (TTL)	Synchronization signal generated by the SOS Sensor that indicates the start of each scan

- **Print Cartridge Sensor Assembly function**

The Print Cartridge Sensor Assembly has the Print Cartridge Switch and the LD Switch mounted inside. The Actuator in the Print Cartridge Sensor Assembly is depressed by the projection of the Print Cartridge to actuate the Print Cartridge Switch and the LD Switch. When the Print Cartridge is not installed, the LD Switch is deactuated and opens the 5VDC-LD circuit, stopping laser light emission.

WARNING

The LD Switch is the safety switch against the laser light. Never cheat the LD Switch to avoid exposure to the laser light beam. Direct eye exposure to the laser light beam may cause eye injury or blindness.

4. Print Engine Controller PWB<-->HVPS<-->Print Cartridge (BCR and MAG. ROLL), BTR, and DETACK SAW

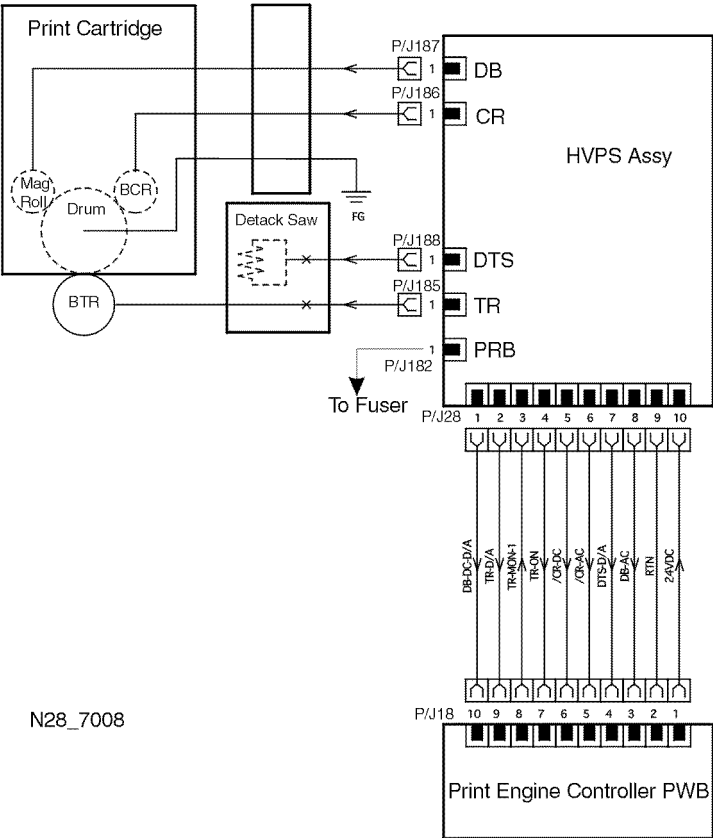


Table 6 Signal names for the Print Engine Controller PWB<-->HVPS path

Signal Name	Description
TR-ON	Control signal to switch the TR on and off (H=5.6V) (L=0V)
CR-DC	Control signal to switch the DC component of the CR and PRB on and off (H=24V) (L=0V)
CR-AC	Constant-frequency pulse signal that provides the source of oscillation for generating the AC component of the CR
DTS-PWM	Control signal to select the DTS Duty(0 ~ 100%)
DB-AC	Constant-frequency pulse signal that provides the source of oscillation for generating the AC component of the DB (Development Bias)

Table 7 HVPS Outputs

Terminal	Connector	Output	Voltage or Current
CR	P/J186	CR(AC)	1.55 mA (Average)
		CR(DC)	-420 VDC
DB	P/J187	DB(AC)	2.0 kVp-p
		DB(DC)	-300 VDC
TR	P/J185	TR(+)	2.5 kV
		TR(-)	-650 VDC
DTS	P/J188	DTS	-1.13 kVDC
PRB	P/J182	PRB	350 VDC

Figure 7 Print Engine Controller PWB-HVPS-Print Cartridge, BTR, and Detack Saw

Table 6 Signal names for the Print Engine Controller PWB<-->HVPS path

Signal Name	Description
DB-DC-D/A	Control signal to select the DB (Development Bias) voltage (0 ~ 3.3VDC)
TR-DA	Control signal to select the TR(+) current (0 ~ 3.3VDC)
TR MON-I	Monitor signal of the TR(+) current (0 ~ 3.3VDC) by the MTVC

NOTE: The TR(+) (Transfer voltage) and the DTS (Detack voltage) while transfer and detack are in progress are determined by the NTDVC (Numerical Transfer and Detack Voltage Control).

5. Print Engine Controller PWB <--> REG. CLUTCH and REG. SENSOR

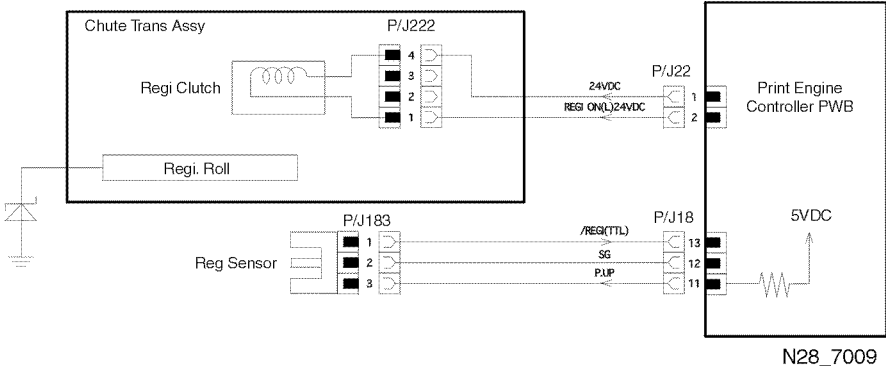


Figure 8 Print Engine Controller PWB-Reg. Clutch and Reg. Sensor

Table 8 Signal names for the Print Engine Controller PWB <--> REG. Clutch and Reg. Sensor

Signal Name	Description
REG. ON(L) 24VDC	Registration Clutch control signal. The Registration Clutch is actuated when this signal is Low, and deactivated when High.
/REG. IN (TTL)	Signal from the Registration Sensor. This signal is Low when the Registration Sensor is actuated.

6. Print Engine Controller PWB <--> FEED SOLENOID, TURN CLUTCH, NO-PAPER SENSOR

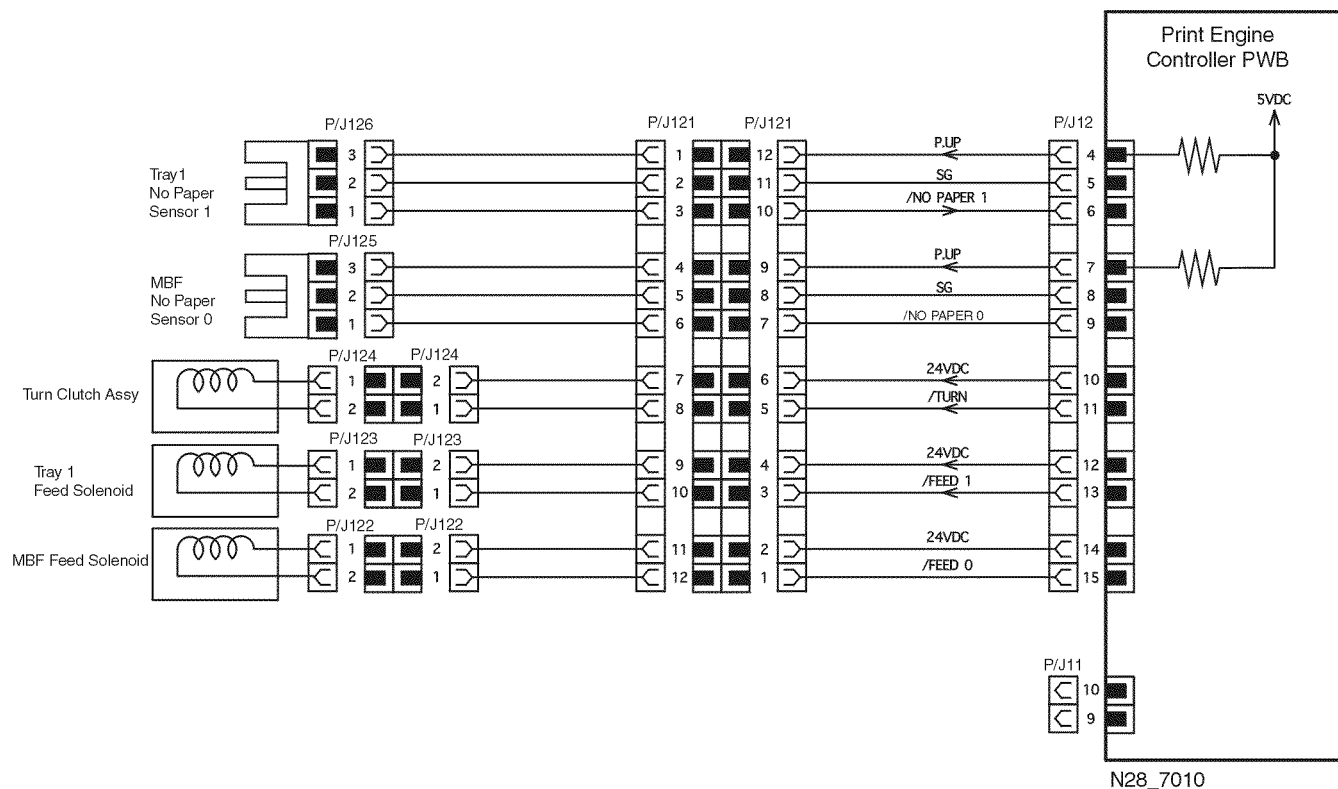


Figure 9 Print Engine Controller PWB-Feed Solenoid, Turn Clutch, No Paper Sensor

Table 9 Signal names for the Print Engine Controller PWB <--> FEED SOLENOID, TURN CLUTCH, NO-PAPER SENSOR path

Signal Name	Description
/FEED0 ON(L) 24VDC	Feed Solenoid 0 control signal. The Feed Solenoid 0 (Feed Solenoid of the Tray 1) is actuated when this signal is Low, and deactivated when High.
/FEED1 ON(L) 24VDC	Feed Solenoid 1 control signal. The Feed Solenoid 1 (Feed Solenoid of the Feeder 1) is actuated when this signal is Low, and deactivated when High.
/TURN ON(L) 24VDC	Turn Clutch control signal. The Turn Clutch is actuated when this signal is Low, and deactivated when High.
/NO PAPER0 (TTL)	Signal from the No Paper Sensor 0 (No Paper Sensor of the Tray 1). This signal is Low when the No Paper Sensor 0 is actuated.
/NO PAPER1 (TTL)	Signal from the No Paper Sensor 1 (No Paper Sensor of Tray 1). This signal is Low when the No Paper Sensor 1 is actuated.

Table 10 Feed Solenoid and Electromagnetic Clutch winding resistance

MBF Feed Solenoid winding resistance	90 ohms 10% (at 20° C)
Tray 1 Feed Solenoid winding resistance	90 ohms 10% (at 20° C)
Turn Clutch Assembly winding resistance	192 ohms 10% (at 20° C)

7. Print Engine Controller PWB <--> LOW PAPER SENSOR, P/H UNIT, TRAY 1 PAPER SIZE SWITCH

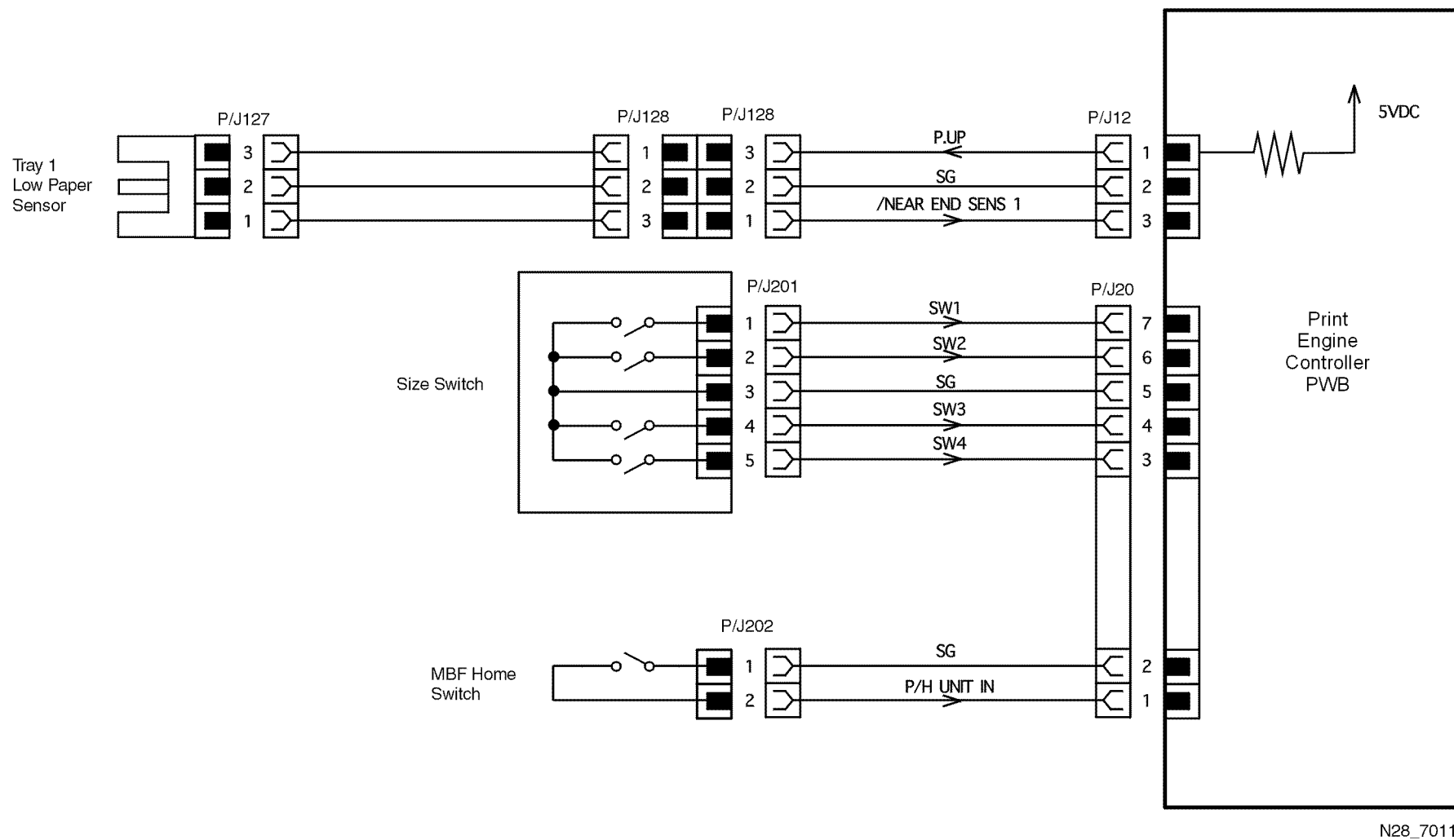


Figure 10 Print Engine Controller PWB-Low Paper Sensor, P/H Unit, Tray1 Paper Size Switch

Table 11 Signal names for the Print Engine Controller PWB<-->Low Paper SENSOR, P/H UNIT, TRAY 1 PAPER SIZE SWITCH path

Signal Name	Description
/NEAR END SENS 1	Signal from the Low Paper Sensor. Goes Low when Paper is low in the Paper Tray
P/H UNIT IN	Signal from the P/H UNIT. Goes? when the MBF is extended
SW1	Signal from the Size witch. Goes Low when SIZE 1BIT of Size witch is actuated
SW2	Signal from the Size witch. Goes Low when SIZE 2BIT of Size witch is actuated
SW3	Signal from the Size witch. Goes Low when SIZE 3BIT of Size witch is actuated
SW4	Signal from the Size witch. Goes Low when SIZE 4BIT of Size witch is actuated

- Paper size detection with SIZE 1BIT to SIZE 4BIT signals

The Print Engine Controller PWB reads the On and Off states of the Paper Size Switches through the SIZE 1BIT to SIZE 4BIT signal lines. The Paper Size Switches are denoted by SW1 to SW4 in the top-to-bottom order. "1" indicates On (actuated state), and "0" Off (deactuated state).

Table 12 Paper Size Detection

Paper Size	Paper Size Switches and SIZE BIT signals			
	SW4	SW3	SW2	SW1
	SIZE 4 BIT	SIZE 3 BIT	SIZE 2 BIT	SIZE 1 BIT
COM-10 SEF	-	-	-	-
DL SEF	1	0	0	1
Monarch SEF	-	-	-	-

Table 12 Paper Size Detection

Paper Size	Paper Size Switches and SIZE BIT signals			
	SW4	SW3	SW2	SW1
	SIZE 4 BIT	SIZE 3 BIT	SIZE 2 BIT	SIZE 1 BIT
Cassette removed	-	-	-	-
Non-regular size	-	-	-	-
Ledger SEF	-	-	-	-
A3 SEF	0	1	1	0
B4 SEF	0	0	1	0
Legal 14" SEF	1	0	1	0
Legal 13" SEF	1	0	0	0
A4 SEF	1	1	0	0
Letter SEF	-	-	-	-
Letter LEF	1	1	0	1
A4 LEF	0	1	0	1
B5 SEF	-	-	-	-
Executive LEF	-	-	-	-
A5 LEF	1	0	1	1
Statement LEF	-	-	-	-
Postcard SEF	0	0	0	1
C5 SEF	0	0	1	1

8. Print Engine Controller PWB <--> MAIN MOTOR

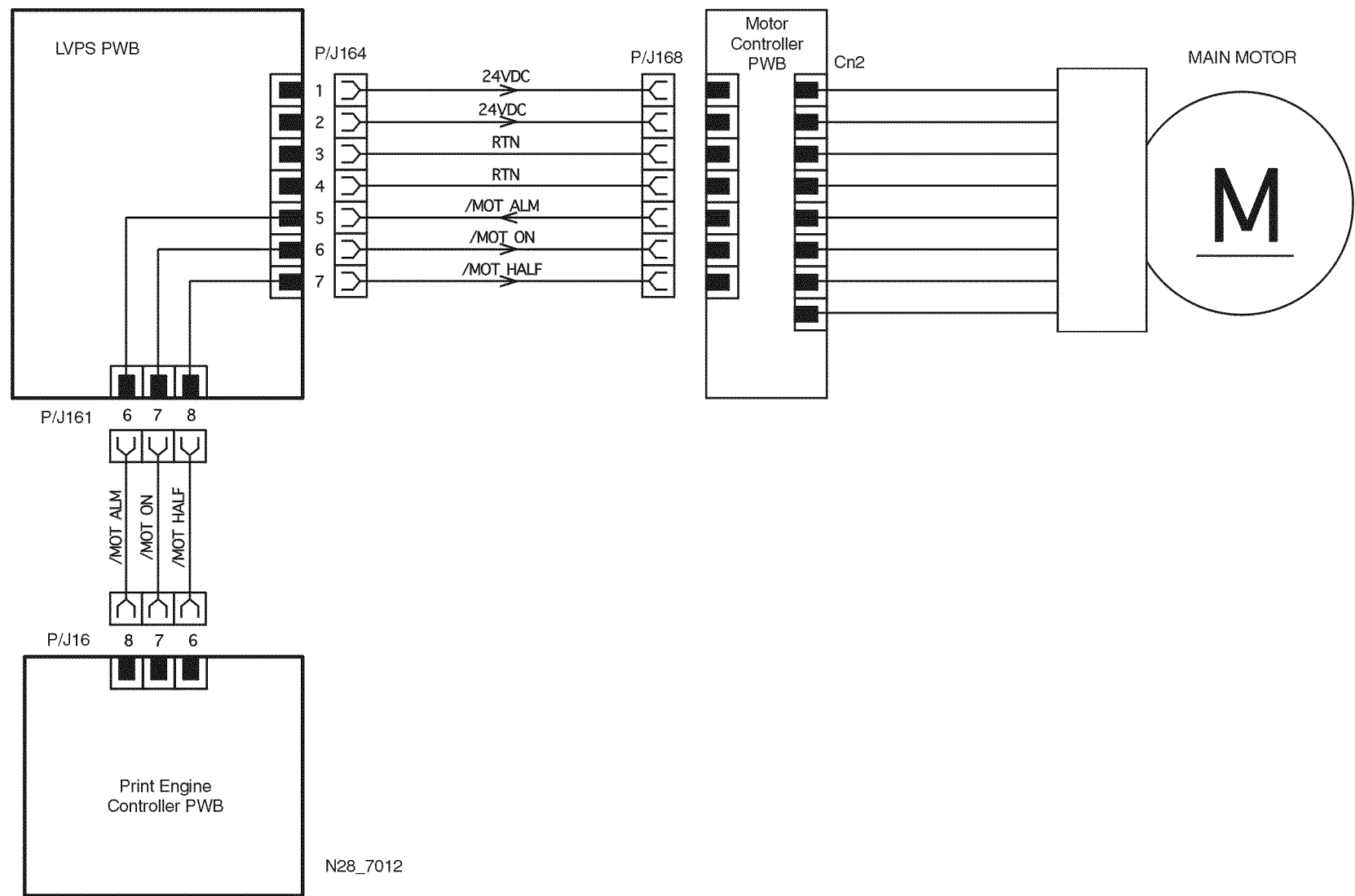
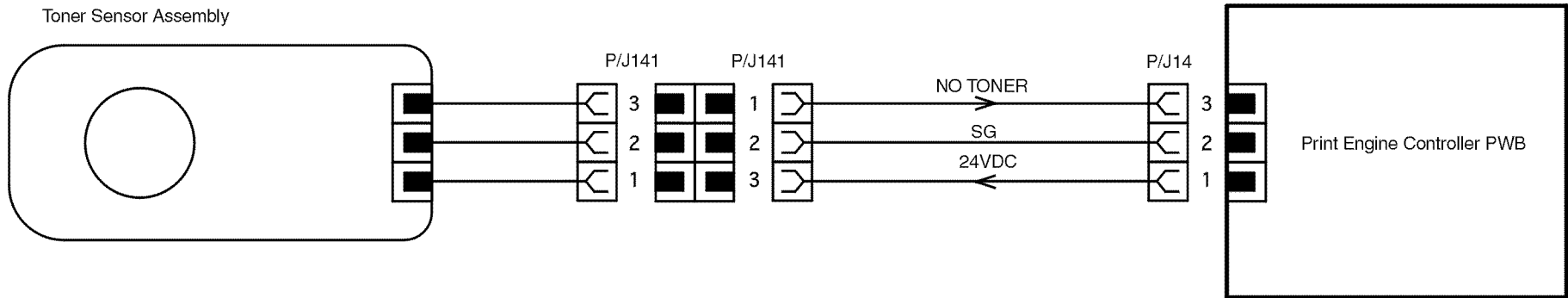


Figure 11 Print Engine Controller PWB-Main Motor

Table 13 Signal names for the Print Engine Controller PWB <--> LVPS <--> Main Motor path

Signal Name	Description
/MOT HALF (TTL)	Control signal to switch the speed of the Main Motor between Normal and Half. Low: Half speed, High: Normal speed
/MAIN MOT (TTL)	Main Motor monitor signal. Goes Low when the rotation of the Main Motor is abnormal.
MOT ALM (TTL)	Main Motor Control Signal to switch the Main Motor on and off (H=TTL) (L=TTL)

9. Print Engine Controller PWB <--> TONER SENSOR



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Figure 12 Print Engine Controller PWB-Toner Sensor

Table 14 Signal names for the Print Engine Controller PWB <--> Toner Sensor path

Signal Name	Description
/NO TONER (TTL)	Signal from the Toner Sensor. Goes Low when toner is low in the Print Cartridge.

10. Print Engine Controller PWB <--> Duplex Interface PWB <--> FULL STACK SENSOR

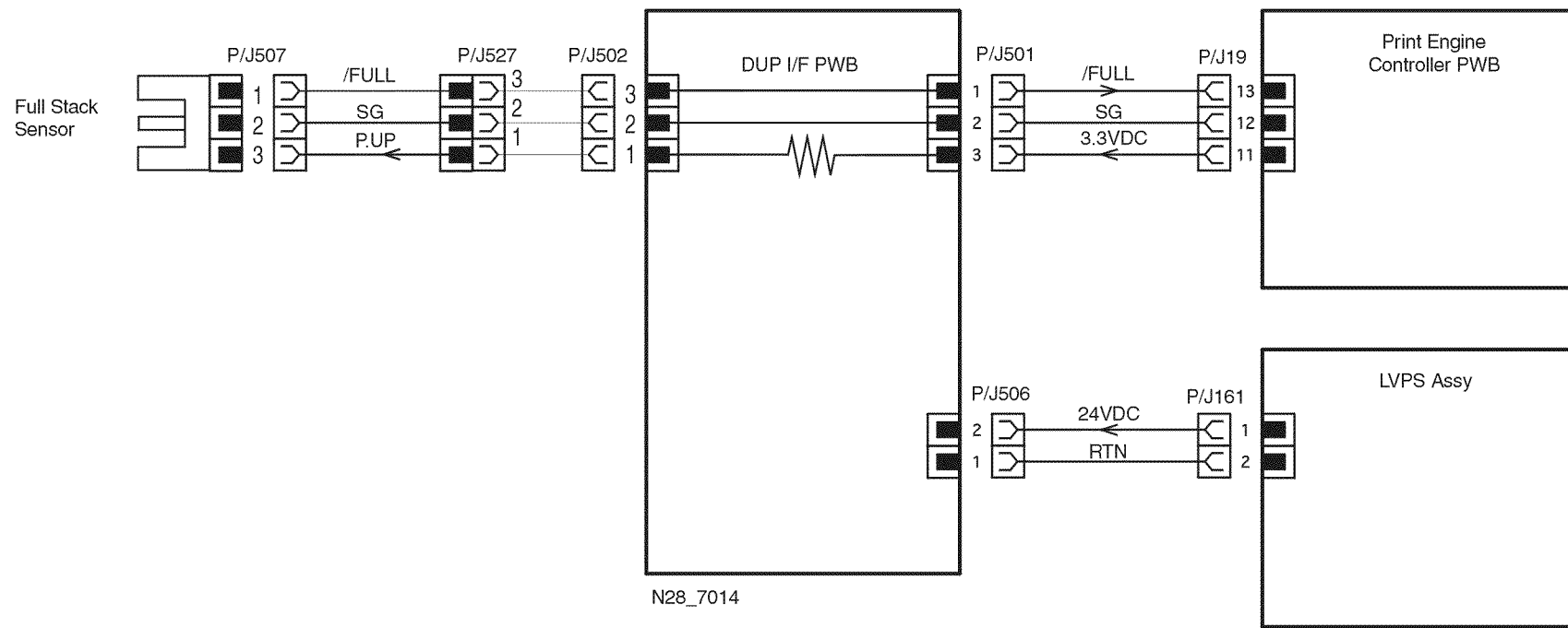


Figure 13 Print Engine Controller PWB-Duplex Interface PWB-Full Stack Sensor

**Table 15 Signal names for the Print Engine Controller PWB<-->Duplex Interface
PWB <--> FULL STACK SENSOR path**

Signal Name	Description
/FULL STACK(TTL)	Signal from the Full Stack Sensor. Goes Low when the Full Stack Sensor is deactuated.

11. CONTROLLER <--> Control Panel

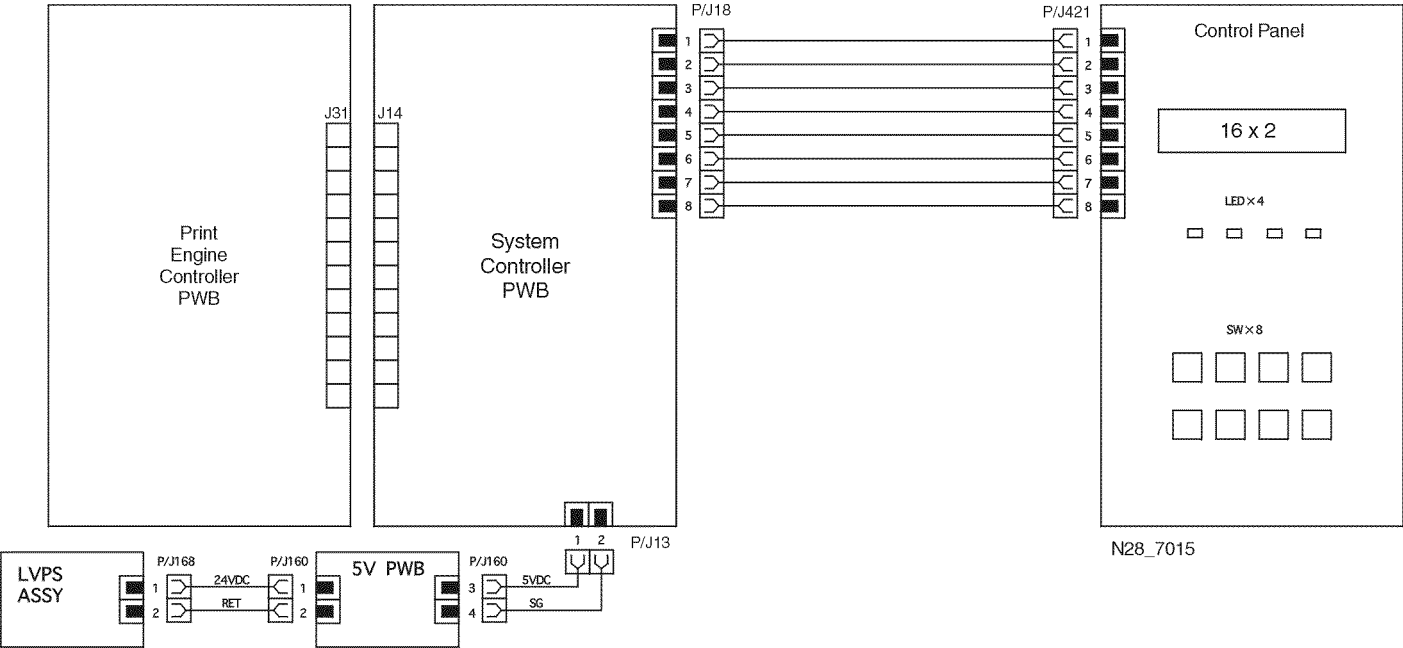


Figure 14 Controller-Control Panel

12. Print Engine Controller PWB <--> DIAGNOSTIC TOOL

Plug/Jack (P/J) Connector Locations for Engine

Contents

4. Plug/Jack (P/J) Connector Locations

4.1 Plug/Jack (P/J) Connector Location Table (Table 16)

4.2 Plug/Jack (P/J) Connector Location Diagrams (Figure 15, Figure 16, & Figure 17)

4. Plug/Jack (P/J) Connector Locations

4.1 Plug/Jack (P/J) Connector Location Table (Table 16)

Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinate s	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
11	H-18	Print Engine Controller PWB	PL 9.1	Laser NS Harness Assembly	18	Connects Print Engine Controller PWB and Laser Assembly.
12	I-17	Print Engine Controller PWB	PL 9.1	P/H Harness Assembly	16	Connects Print Engine Controller PWB and P/H Unit Harness Assembly.
13	I-18	Print Engine Controller PWB	PL 9.1	Feeder Harness Assembly	PL 9.1	Connects Print Engine Controller PWB and High Feeder 2 Assembly.
14	I-18	Print Engine Controller PWB	PL 8.1	Print Cartridge Sensor Harness Assembly	23	Connects Print Engine Controller PWB and Print Cartridge Sensor.
15	H-19	Print Engine Controller PWB	PL 8.1	Convertible Harness Assembly	PL 9.1	Connects Print Engine Controller PWB and Control Panel.
16	I-19	Print Engine Controller PWB	PL 9.2	LVPS Harness Assembly	PL 9.2 item 1	Connects Print Engine Controller PWB and LVPS.
17	I-18	Print Engine Controller PWB	PL 8.1	Fuser Harness Assembly	10	Connects Print Engine Controller PWB, Fuser Assembly and Fuser PWB.
18	H-19	Print Engine Controller PWB	PL 8.1	HVPS Harness Assembly	PL 9.1	Connects Print Engine Controller PWB, HVPS and Regi. Sensor.
19	I-19	Print Engine Controller PWB	PL 8.1	Duplex I/F Harness Assembly	PL 9.1	Connects Print Engine Controller PWB and Duplex I/F PWB.
20	H-20	Print Engine Controller PWB	PL 8.1	SNS Harness Assembly	PL 3.1	Connects Print Engine Controller PWB and CSTL Guide Assembly. (CST Sensor, Size Switch)

Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinate s	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
21	H-18	Print Engine Controller PWB	PL 8.1	Print Cartridge Sensor Harness Assembly	8.1.17	Connects Print Engine Controller PWB and Print Cartridge Sensor.
22	I-18	Print Engine Controller PWB	PL 8.1	REGI Harness Assembly	PL 9.1	Connects Print Engine Controller PWB and Regi Clutch.
31	H-24	Print Engine Controller PWB	PL 8.1	System Controller PWB	PL 9.1	Connects Print Engine Controller PWB and System Controller PWB.
112	G-23	Laser Assembly	PL 8.1	Laser NS Harness Assembly	PL 9.1	Connects Laser Assembly (LD Assembly) and Print Engine Controller PWB.
113	D-23	Laser Assembly	PL 8.1	Laser Harness Assembly	PL 8.1	Connects Laser Assembly (SOS Sensor) and LD Assembly.
114	H-22	Laser Assembly	PL 8.1	Laser NS Harness Assembly	PL 9.1	Connects Laser Assembly (Scanner Motor Assembly) and Print Engine Controller PWB.
115	G-23	Laser Assembly	PL 8.1	Laser Harness Assembly	PL 8.1	Connects Laser Assembly (LD Assembly) and SOS Sensor.
121	C-8	Tray 1	PL 4.2	P/H Unit Harness Assembly	PL 4.2	Connects Tray 1 Assembly and Print Engine Controller PWB.
122	D-9	Tray 1	PL 4.2	P/H Unit Harness Assembly	PL 4.2	Connects Tray 1 Assembly (Tray 1 Feed Solenoid) and P/H Unit Harness Assembly (Print Engine Controller PWB).
123	D-9	Tray 1	PL 4.2	P/H Unit Harness Assembly	PL 4.2	Connects Tray 1 Assembly (Feed CTS Solenoid) and P/H Unit Harness Assembly (Print Engine Controller PWB).

Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinates	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
124	D-9	Tray 1	PL 4.2	P/H Unit Harness Assembly	PL 4.2	Connects Tray 1 Assembly (Turn Clutch Assembly) and P/H Unit Harness Assembly (Print Engine Controller PWB).
125	E-9	Tray 1	PL 4.2	P/H Unit Harness Assembly	PL 4.2	Connects Tray 1 Assembly (Photo Sensor) and P/H Harness Assembly (Print Engine Controller PWB).
126	F-9	Tray 1	PL 4.2	P/H Unit Harness Assembly	PL 4.2	Connects Tray 1 Assembly (Photo Sensor) and P/H Harness Assembly (Print Engine Controller PWB).
127	G-26	Guide CSTL	PL 3.1	NESNS Harness Assembly	21	Connects Tray 1 Guide Left (Photo Sensor) and P/H Harness Assembly (Print Engine Controller PWB).
128	I-25	Not mounted	PL 3.1	NESNS Harness Assembly	PL 3.1	Connects NESNS Harness Assembly and P/H Harness Assembly (Print Engine Controller PWB).
131	B-10	Left Frame Sub Assembly	—	Feeder Harness Assembly	PL 9.1	Connects Feeder 2 and Print Engine Controller PWB.
141	C-7	Sensor Assembly Print Cartridge	PL 8.1	Toner Sensor Harness Assembly	PL 8.1	Connects Toner Sensor and Print Engine Controller PWB.
161	E-41	LVPS	PL 9.2	LVPS Harness Assembly	PL 9.2 item 1	Connects LVPS Assembly and Print Engine Controller PWB.

Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinates	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
162	F-42	LVPS	PL 9.2	I/L Harness Assembly	6	Connects LVPS Assembly and Interlock Switch (Fuser Interlock Switch, I/R switch).
163	F-42	LVPS	PL 9.2	System Controller PWB 3.3V Harness Assembly	PL 9.2	Connects LVPS Assembly and System Controller PWB.
164	F-42	LVPS	PL 9.2	Motor Assembly	PL 7.1	Connects LVPS Assembly and Main Motor Assembly.
165	E-41	LVPS	PL 9.2	Main Fan	PL 9.1	Connects LVPS Assembly and Main Fan.
166	E-41	LVPS	PL 9.2	LVPS Fan	PL 9.1	Connects LVPS Assembly and LV Fan.
167	D-41	LVPS	PL 9.2	Inlet	PL 9.1	Connects LVPS Assembly and Inlet Assembly.
168	F-41	LVPS	PL 9.2	System Controller PWB 5V Harness Assembly	4	Connects LVPS Assembly and SMB-5V.
169	H-26	SMB-5V	PL 9.2	System Controller PWB 5V Harness Assembly	4	Connects SMB-5V, LVPS and System Controller PWB.
171	C-41	Fuser PWB	PL 9.2	Fuser Harness Assembly	10	Connects Fuser PWB and Print Engine Controller PWB.
172	C-41	Fuser PWB	PL 9.2	Fuser Harness Assembly	10	Connects Fuser PWB, Fuser Assembly and Fuser Interlock Switch.
174	J-7	Fuser Assembly	PL 9.2	Fuser Harness Assembly	10	Connects Fuser Assembly, Fuser PWB, Fuser Interlock Switch, Print Engine Controller PWB and HVPS.
177	J-8	Fuser Interlock Switch	PL 9.2	Fuser Harness Assembly	10	Connects Fuser Interlock Switch and Fuser Assembly.
178	J-8	Fuser Interlock Switch	PL 9.2	Fuser Harness Assembly	10	Connects Fuser Interlock Switch and Fuser PWB.

Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinates	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
181	E-34	HVPS	PL 9.1	HVPS Harness Assembly	22	Connects HVPS and Print Engine Controller PWB.
182	D-33	HVPS	PL 9.2	Fuser Harness Assembly	10	Connects HVPS and Fuser Assembly.
183	G-8	Paper Transport	PL 9.1	HVPS Harness Assembly	22	Connects Paper Transport (Regi Sensor) and Print Engine Controller PWB.
185	E-33	HVPS	PL 9.1	Print Cartridge (TR)	PL 9.1	Connects HVPS and Print Cartridge (TR).
186	C-33	HVPS	PL 9.1	Print Cartridge (CR)	PL 9.1	Connects HVPS and Print Cartridge (CR).
187	C-33	HVPS	PL 9.1	Print Cartridge (DB)	PL 9.1	Connects HVPS and Print Cartridge (DB).
188	E-33	HVPS	PL 9.1	Print Cartridge (DTS)	PL 9.1	Connects HVPS and Print Cartridge (DTS).
201	H-26	Tray 1 Guide Left	PL 3.1	SNS Harness Assembly	PL 3.1	Connects Tray 1 Guide Left (Size Switch) and Print Engine Controller PWB.
202	H-26	Tray 1 Guide Left	PL 3.1	SNS Harness Assembly	PL 3.1	Connects Tray 1 Guide Left (CST Sensor) and Print Engine Controller PWB.
211	C-7	Print Cartridge Sensor Assembly	PL 8.1	Print Cartridge Sensor Harness Assembly	23	Connects Print Cartridge Sensor Assembly and Print Engine Controller PWB.
222	E-7	Paper Transport	PL 5.1	REGI Harness Assembly	PL 9.1	Connects Paper Transport (Regi Clutch) and Print Engine Controller PWB.
311	F-27	System Controller PWB	PL 9.2	System Controller PWB 3.3V Harness Assembly	3	Connects System Controller PWB and LVPS.
312	H-26	System Controller PWB	PL 9.2	System Controller PWB 5V Harness Assembly	4	Connects System Controller PWB and SMB-5V.
421	B-6	Console Assembly	PL 1.1	Convertible Harness Assembly	PL 9.1	Connects Console Assembly and MCV PWB.

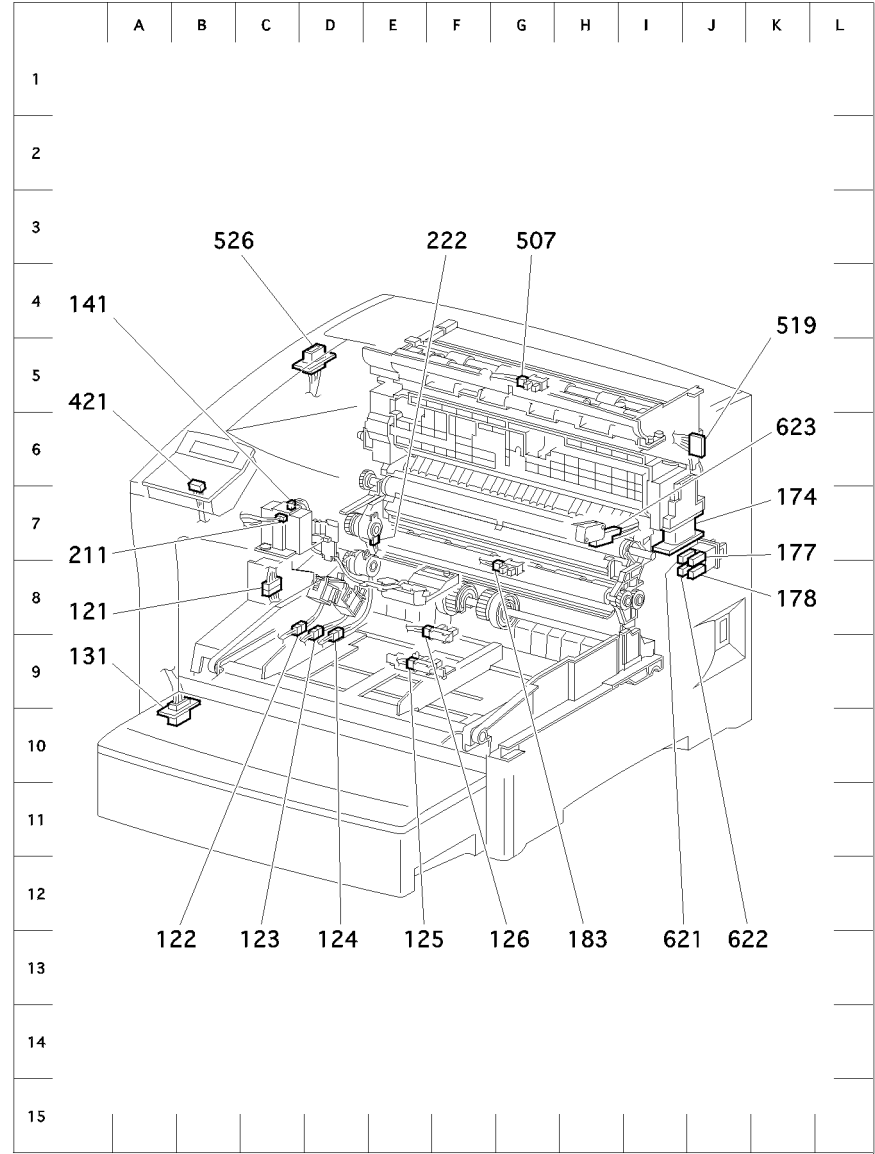
Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinates	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
501	I-34	Duplex I/F	PL 9.2	Duplex I/F Harness Assembly	PL 9.1	Connects Duplex I/F PWB and Print Engine Controller PWB.
502	I-34	Duplex I/F	PL 9.2	Duplex Full -I/F Harness Assembly	PL 9.1	Connects Duplex I/F PWB and Full Stack Sensor.
503	I-34	Duplex I/F	PL 9.2	Duplex PWB	-	Connects Duplex I/F PWB and Duplex Assembly.
504	I-34	Duplex I/F	PL 9.2	STK-I Harness Assembly	PL 9.1	Connects Duplex I/F PWB and Stacker Assembly.
505	I-34	Duplex I/F		Flap-I Harness Assembly	PL 9.1	Connects Duplex I/F PWB and Flapper Module.
506	J-34	Duplex I/F	PL 9.2	LVPS Harness Assembly	PL 9.2 item 1	Connects Duplex I/F PWB and LVPS.
507	G-5	Exit Assembly	PL 6.1	Full Stack Sensor Harness	18	Connects Full Stack Sensor and Duplex I/F PWB.
519	J-6	Exit Assembly	PL 6.1	Direction Solenoid Harness	13	Connects Flapper Module and Duplex I/F PWB.
526	D-5	Bracket Assembly OCT-L	PL 7.1	STK-I Harness Assembly	PL 6.1	Connects Stacker Assembly and Duplex I/F PWB.
527	E-26	HV Cover	PL 6.1	Full Stack Sensor Harness	18	Intermediate Connectors. Connects Full Stack Sensor and Duplex I/F PWB.
528	E-26	HV Cover	PL 7.1	Direction Solenoid Harness	PL 6.1	Intermediate Connectors. Connects Flapper Module and Duplex I/F PWB.
621	J-8	Fuser Interlock Switch	PL 8.1	I/L Harness Assembly	6	Connects Fuser Interlock Switch and LVPS.
622	J-8	Fuser Interlock Switch	PL 9.1	I/L Harness Assembly	6	Connects Interlock Switch and I/R Switch.
623	H-7	Guide Print Cartridge-R	PL 8.1	I/L Harness Assembly	6	Connects I/R Switch, Fuser Interlock Switch and LVPS.

Table 16 Plug/Jack (P/J) Connector Locations

P/J	Coordinates	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
CN2	F-42	Motor Assembly	PL 7.1	Main Motor	PL 7.1	Connects Main Drive Motor Controller PWB to Main Motor.

4.2 Plug/Jack (P/J) Connector Location Diagrams



N28_7016

Figure 15

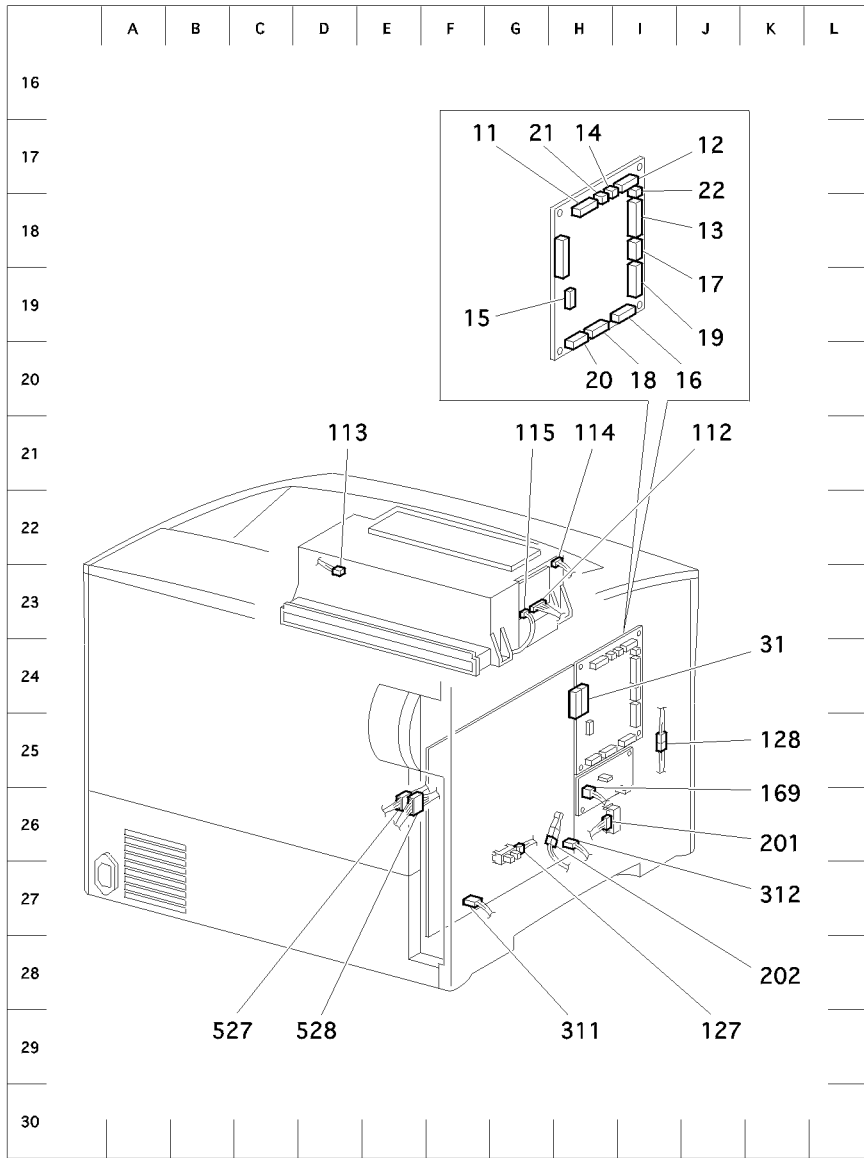


Figure 16

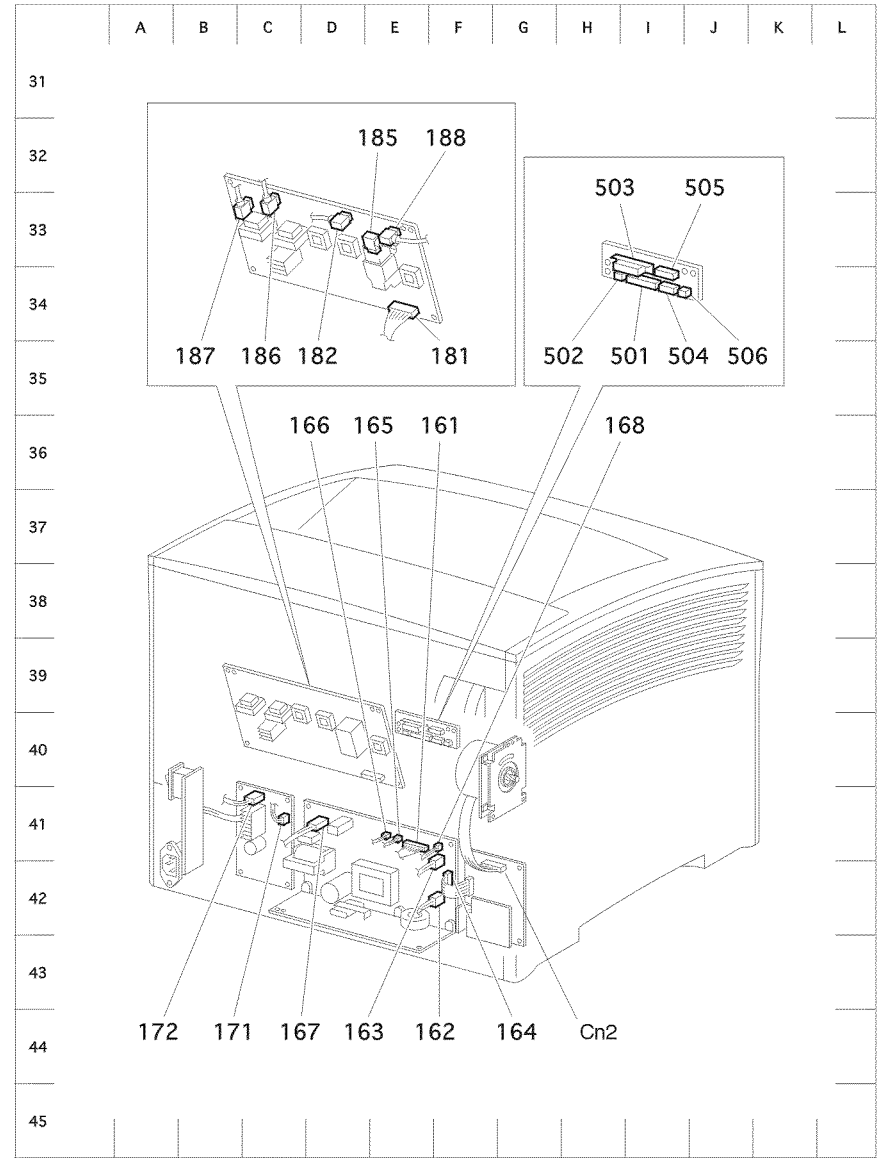


Figure 17

500 Sheet Feeder

Location of P/J Connectors

Use the P/J table below and the P/J map on the next page to locate a specific P/J connector within the Feeder and Cassette Table 1. To find the location of a P/J:

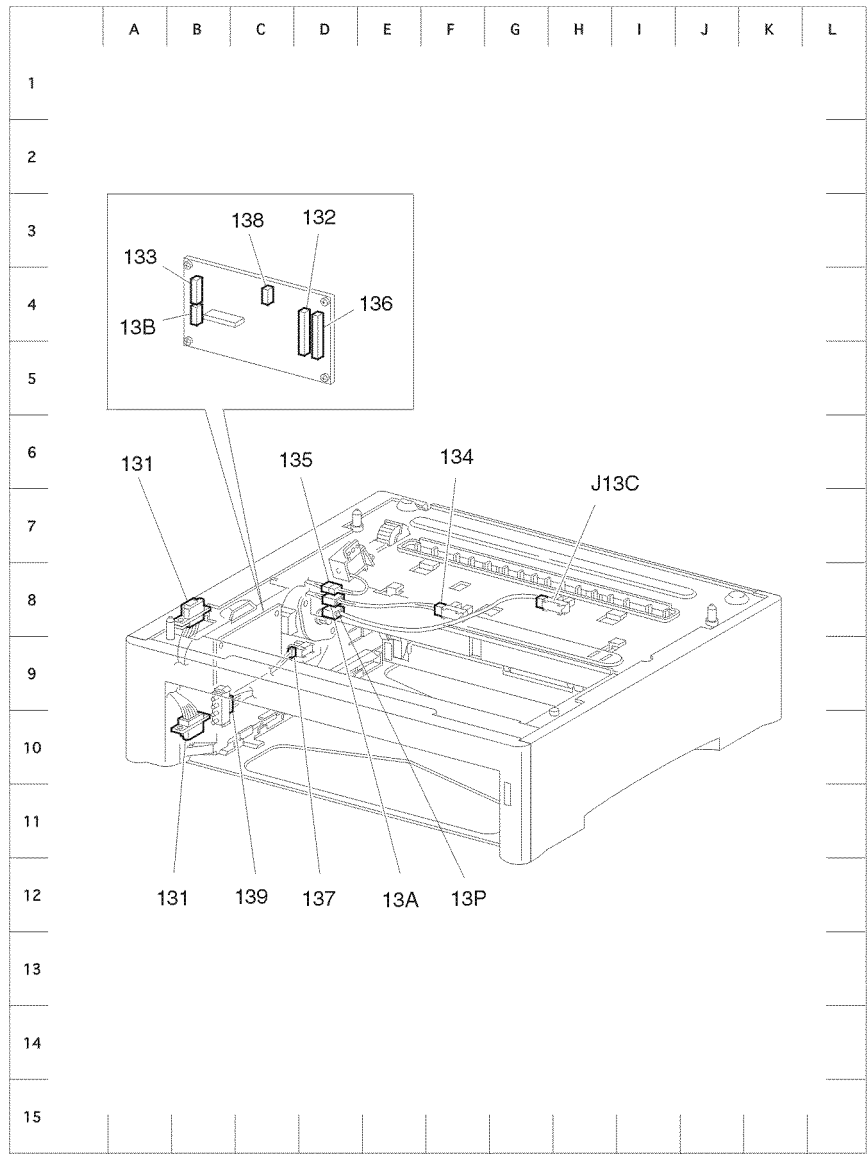
1. Locate the P/J connector number in the first column of the table.
2. Locate the corresponding coordinates in the second column, such as I7 or J7.
3. Go to the map.
4. Cross-reference the letter and number of the P/J coordinates with the letters and numbers on the map.
5. The P/J connector is located within the area where the coordinates cross.

Table 1 P/J Locations

P/J	Coordinate s	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
13A	D8	Feeder Assembly	PL 11.2	Harness	23	Intermediate connectors between J13A of the NPS Harness and J13A of the Feeder Harness.
13B	B4	Feeder Assembly	PL 11.2	Feed Motor Connector	33	Connects the Feed Motor to the Feeder PWB.
J131	B8	Feeder Assembly	PL 11.2	Harness	24	Connects the Harness Assembly J131 to the Harness Assembly J136 of the Upper Feeder (Feeder 1 or Feeder 2).
131	B10	Feeder Assembly	PL 11.2	Harness	28	Connects the Harness Assembly J131 to the Harness Assembly J131 of the Lower Feeder (Feeder 3).
132	D4	Feeder Assembly	PL 11.2	Harness		Connects the Harness Assembly J131 (the harness for connection to the Feeder PWB of the upper Feeder (Feeder 1 or Feeder 2)) to the Feeder PWB of the Feeder.
133	B4	Feeder Assembly	PL 11.3	Harness	27	Connects the Feeder Harness to the Feeder PWB.

Table 1 P/J Locations

P/J	Coordinate s	Location (Note 1)		Harness (Note 2)		Notes
		Location Name	PL	Harness Name (Note 3)	Item #	
134	F8	Feeder Assembly	PL 11.2	Harness	23	Connects the No Paper Sensor to the Harness Assembly J134.
135	D8	Feeder Assembly	PL 11.3	Harness	27	Connects the Feed Solenoid to the Feeder Harness.
136	D5	Feeder Assembly	PL 11.2	Harness	24	Connects the Harness Assembly J136 (the harness for connection to the Feeder PWB of the lower Feeder Assembly J136 (Feeder 3)) to the Feeder PWB of the Feeder.
137	C9	Feeder Assembly	PL 11.3	Harness	26	Connects the Low Paper Sensor to the Feeder Harness.
138	C4	Feeder Assembly	PL 11.3	Harness	26	Connects the SNS Harness to the Feeder PWB.
139	B10	Feeder Assembly	PL 11.3	Harness	27	Connects the Size Sensor to the SNS Harness.



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20. Print Engine Controller PWB "Feeder 2 PWB "Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size and Motor Feed 2 Figure 2

20. Feeder 2 PWB "Feeder 3 PWB" Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size and Motor Feed 3 Figure 3

20. Print Engine Controller PWB "Feeder 2 PWB ("Feeder 3 PWB) "Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size and Feed Motor 2 (or 3) Table 2, Table 3, Table 4, Table 5, Figure 4, and Table 6.

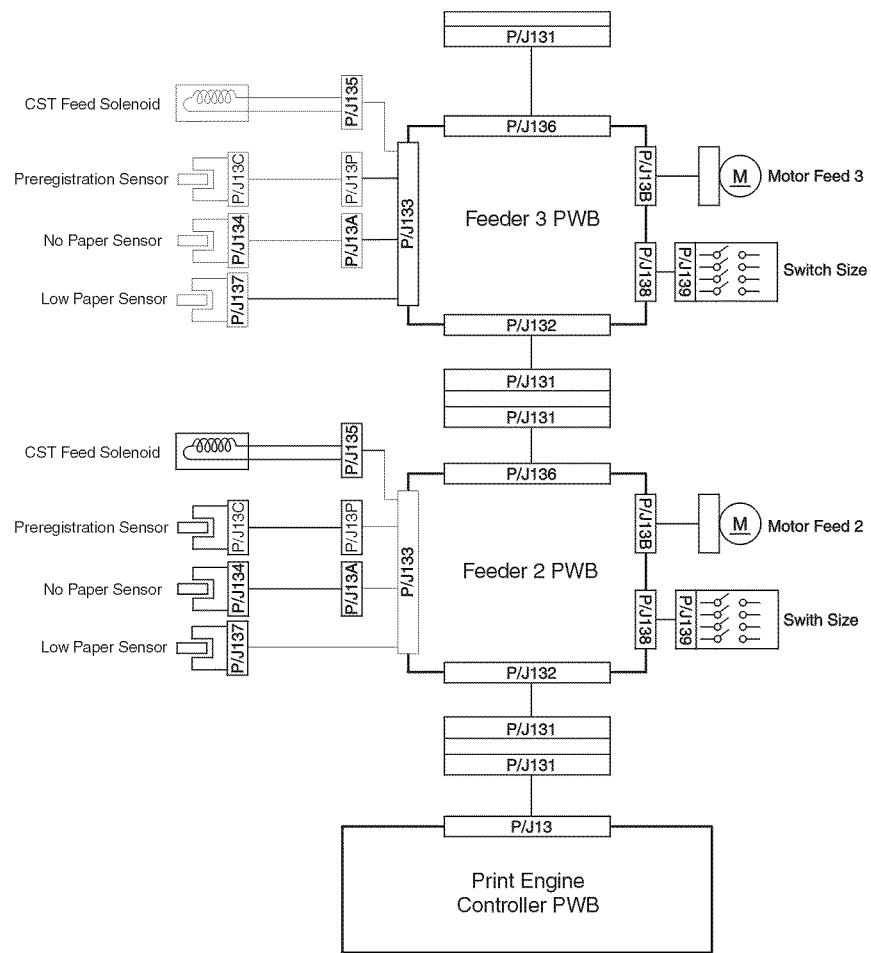
This section contains a Master Wiring Diagram for the 500 Sheet Feeder. The Master Diagram shows the interconnections of the printer, the 500 Sheet Feeders, and the components of the 500 Sheet Feeders. The remainder of this section shows the signal names, pin numbers, and other information in detailed diagrams.

Wiring Diagrams and Signal Information

Contents

Master Wiring Diagram Figure 1

Wiring and Signal Information Between Components

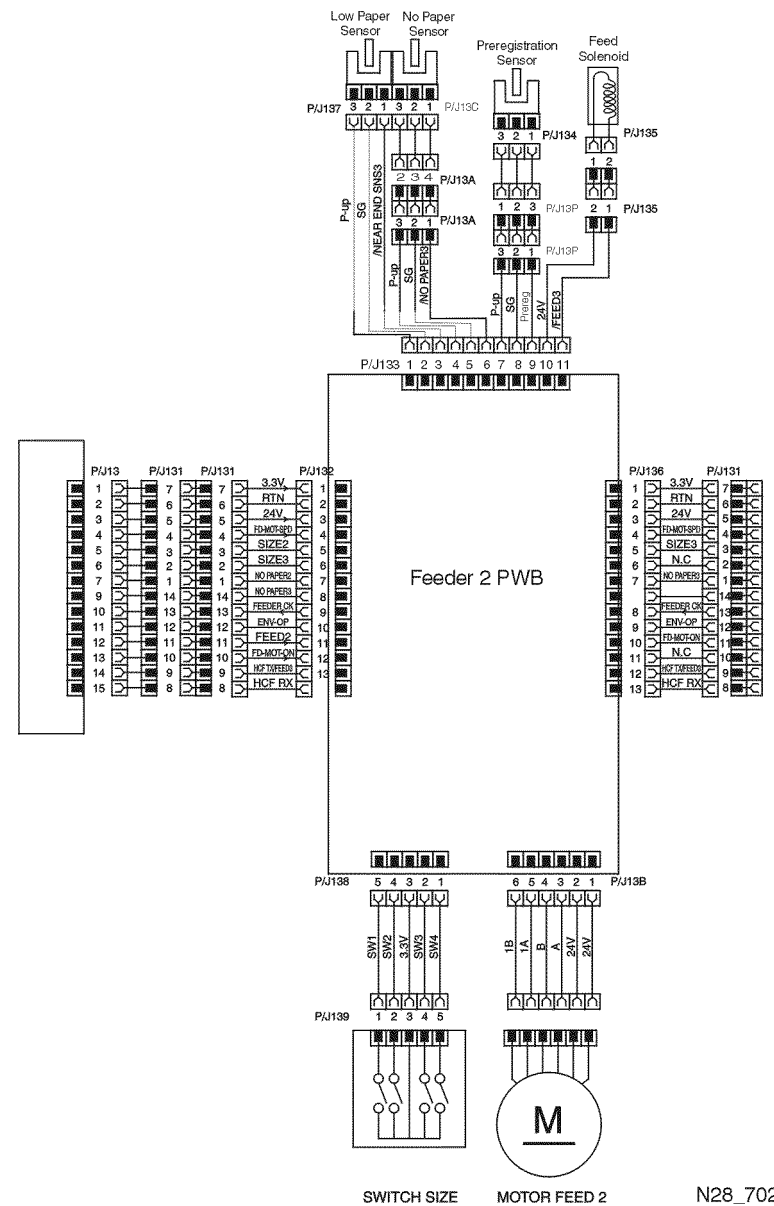


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Figure 1 Master Wiring Diagram

Wiring and Signal Information between Components

20. Print Engine Controller PWB <--> Feeder 2 PWB <--> Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size, and Feed Motor 2



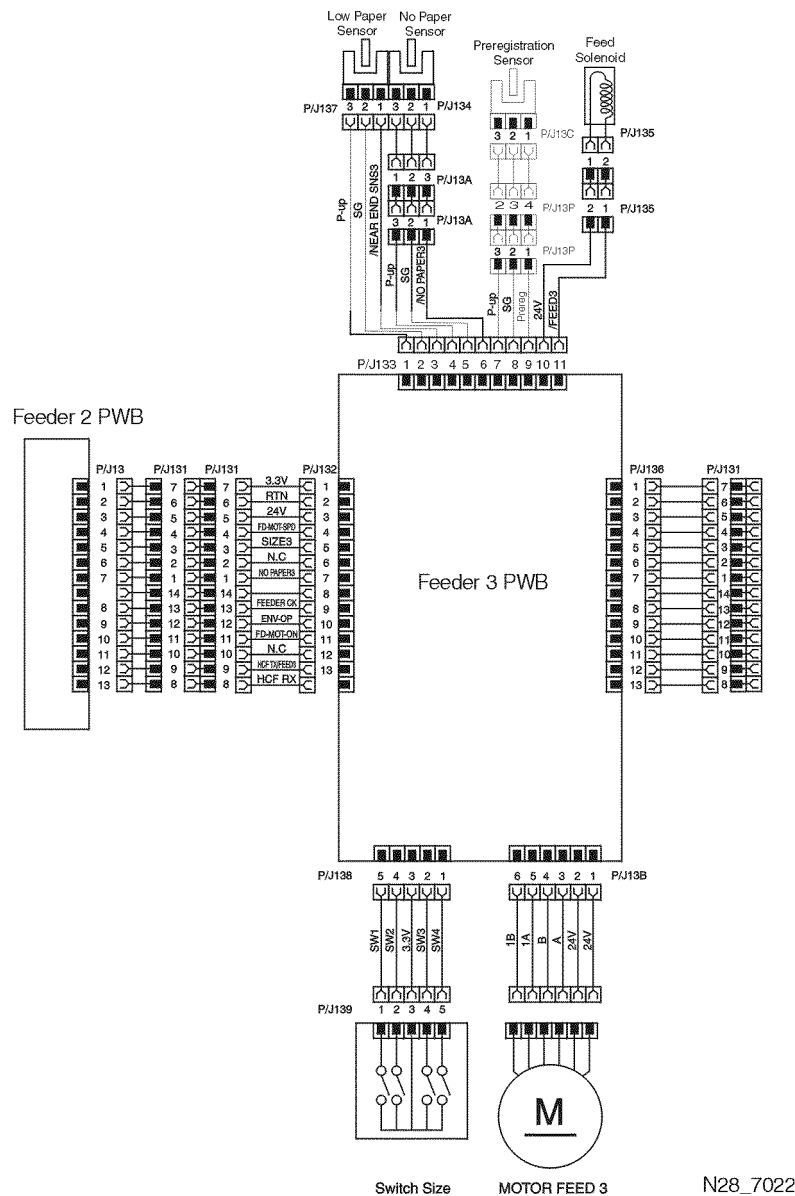


Figure 3 500 Sheet Feeder - Tray 3.

20. Print Engine Controller PWB <--> Feeder 2 PWB (<--> Feeder 3 PWB) <--> Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size, and Feed Motor 2 (or 3)

Table 2 Signal Names

Signal Name	Description
SIZE2 (TTL)	Selects the Switch Size of Feeder 2. When this signal is HIGH, the On or Off states of the Switches Size 1 to 4 of the Feeder 2 are input to the Print Engine Controller PWB on the signal lines SIZE 1BIT to SIZE 4BIT.
SIZE3 (TTL)	Selects the Switch Size of Feeder 3. When this signal is HIGH, the On or Off states of the Switches Size 1 to 4 of the Feeder 3 are input to the Print Engine Controller PWB on the signal lines SIZE 1BIT to SIZE 4BIT.
NO PAPER 2 (TTL)	Signal from the No Paper Sensor 2 (No Paper Sensor of the Feeder 2). This signal is Low when the No Paper Sensor 2 is actuated.
NO PAPER 3 (TTL)	Signal from the No Paper Sensor 3 (No Paper Sensor of the Feeder 2). This signal is Low when the No Paper Sensor 3 is actuated.
FEEDER CK	Signal that indicates the Feeder configuration
ENV_OP	Signal that indicates the Envelop Cassette configuration
FEED 2 (H) 24VDC	Feed Solenoid control signal. The Feed Solenoid 2 (Feed Solenoid of the 500 Sheet Feeder 2) is actuated when this signal is High, and deactivated when Low.
FD_MOT_ON (TTL)	Motor Feed control signal to switch the Motor Feed on and off
2000 Sheet Feeder TX/FEED3 (H) 24VDC	Transmitted data from the Print Engine Controller PWB to the 2000 Sheet Feeder or Feed Solenoid control signal. The Feed Solenoid 3 (Feed Solenoid of the 500 Sheet Feeder 3) is actuated when this signal is High, and deactivated when Low.
2000 Sheet Feeder-RX	Received data from the 2000 Sheet Feeder to the Print Engine Controller PWB

*: Refer to the description of the detection of the feeder configuration in this manual.

20. Print Engine Controller PWB <--> Feeder 2 PWB (<--> Feeder 3 PWB) <--> Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size, and Feed Motor 2 (or 3)

Table 3 Signal Names

Signal Name	Description
/NEAR END SNS2 (or 3)	Signal from the Low Paper Sensor. Goes Low when paper is low in the Tray 2 (or 3).
/NO PAPER2 (or 3)	Signal from the No Paper Sensor (Photo Sensor of the Feeder 2 (or 3)). This signals Low when the Photo Sensor is actuated.
/FEED2 (or 3) ON (L) 24VDC	Tray 1 Feed Solenoid control signal. The Tray 1 Feed Solenoid (Tray 1 Feed Solenoid of the Feeder 2 (or 3)) is actuated when this signal is Low, and deactivated when High.

20. Print Engine Controller PWB <--> Feeder 2 PWB (<--> Feeder 3 PWB) <--> Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size, and Feed Motor 2 (or 3)

Table 4 Signal names for the Feeder 2 PWB (or 3) <--> Switch Size path

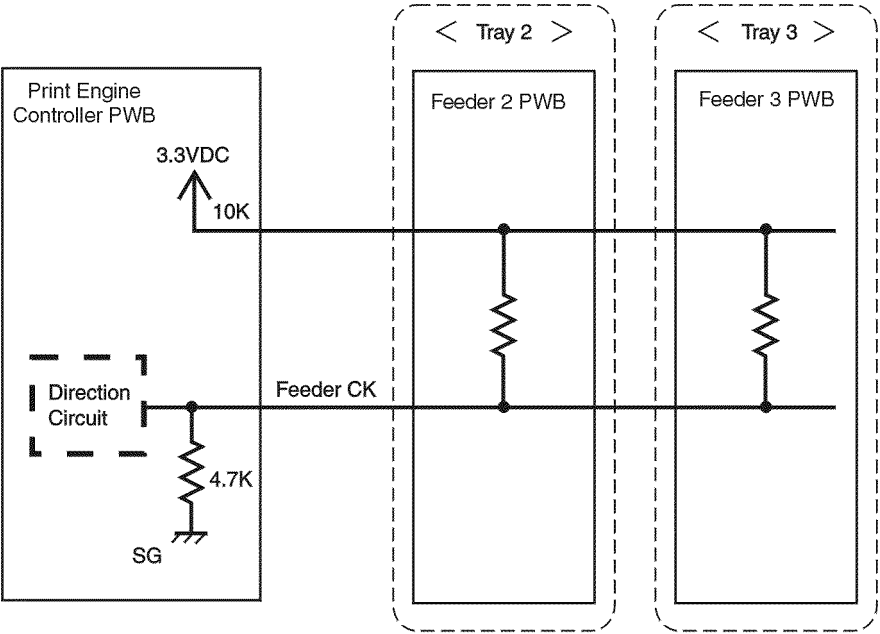
Signal Name	Description
SW1	Signal from the Switch Size. Goes Low when SIZE 1BIT of the Switch Size is actuated.
SW2	Signal from the Switch Size. Goes Low when SIZE 2BIT of the Switch Size is actuated.
SW3	Signal from the Switch Size. Goes Low when SIZE 3BIT of the Switch Size is actuated.
SW4	Signal from the Switch Size. Goes Low when SIZE 4BIT of the Switch Size is actuated.

Table 5 Signal names for the Feeder 2 PWB (or 3) <--> Feed Motor 2 (or 3) path

Signal Name	Description
/B	Feed Motor 2 (or 3) activating signal
/A	Feed Motor 2 (or 3) activating signal
B	Feed Motor 2 (or 3) activating signal
A	Feed Motor 2 (or 3) activating signal

20. Print Engine Controller PWB <--> Feeder 2 PWB (<--> Feeder 3 PWB) <--> Low Paper Sensor, No Paper Sensor, Tray 1 Feed Solenoid, Switch Size, and Feed Motor 2 (or 3)

- Detection of the Feeder configuration through the FEEDER CK signal
When no 500 Sheet Feeder is attached, 3.3 VDC is divided by the resistances R10K and R4.7K on the Print Engine Controller PWB, and the voltage across the resistance R4.7K appears on the FEEDER CK signal. When one or two 500 Sheet Feeders are added, the resistance RF on the PWB Feeder of the added Feeder(s) is connected in parallel with the resistance R10K of the Print Engine Controller PWB, and the voltage across the resistance R10K changes according to the number of 500 Sheet Feeders added. Therefore, the Feeder configuration can be detected from the voltage of the FEEDER CK signal.



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Figure 4

Table 6 Configuration

Feeder Configuration	Feeder 2	Feeder 3
One 500 Sheet Feeder added	O	-
Two 500 Sheet Feeders added	O	O

Duplex Assembly

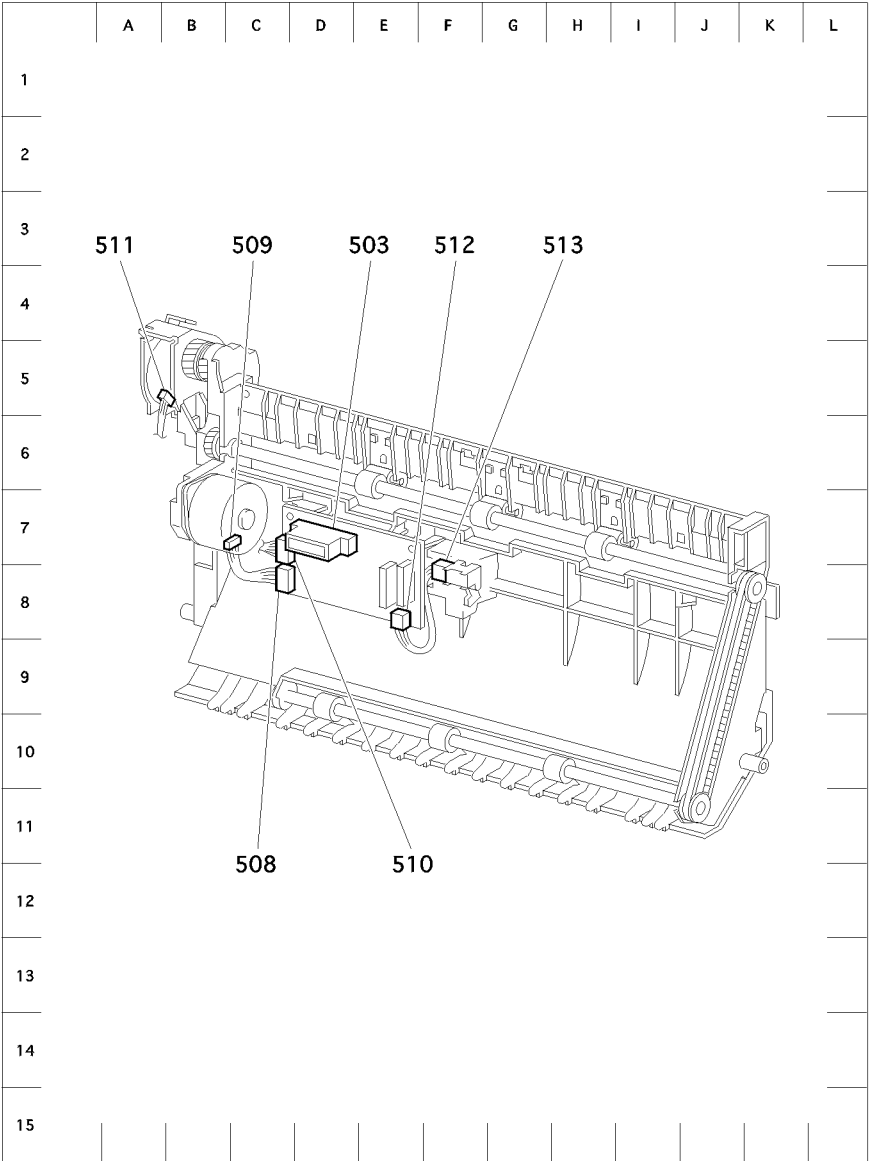
Location of P/J Connectors

Use the P/J table below (Table 1) and the P/J Map (Figure 1) on the next page to locate a specific P/J connector within the Feeder and Cassette.

- Locate the P/J connector number in the first column of the table Table 1.
- Locate the corresponding coordinates in the second column, such as I7 or J7.
- Go to the map Figure 1.
- Cross-reference the letter and number of the P/J coordinates with the letters and numbers on the map.
- The P/J connector is located within the area where the coordinates cross.

Table 1 P/J Locations

Connector	Coordinate	Description
P 503	D7	Connects the Duplex Assembly (Duplex PWB) to the Printer.
P/J 508	C8	Connects the Duplex Motor to the Duplex PWB.
P/J 509	C7	Connects the Duplex Motor.
P/J 510	C7	Connects the Exit Motor to the Duplex PWB.
P/J 511	B5	Connector Inside the Exit Motor.
P/J 512	E8	Connects the Duplex SNS Harness to the Duplex PWB.
P/J 513	F8	Connects the SNS Harness to the Duplex Sensor.



N28_7024

Figure 1 P/J Map

Wiring Diagrams and Signal Information

Contents

Master Wiring Diagram Figure 2

Wiring and Signal Information Between Components

30. Print Engine Controller PWB, Duplex Interface PWB, Duplex PWB, Duplex Motor Assembly, Exit Motor Assembly, and Duplex Sensor Assembly Figure 3, Table 2

This section contains a Master Wiring Diagram for the optional Duplex Assembly. The Master Diagram shows the interconnections of the printer, the optional Duplex Assembly, and the components of it. The remainder of this section shows the signal names, pin numbers, and other information in detailed diagrams.

Master Wiring Diagram

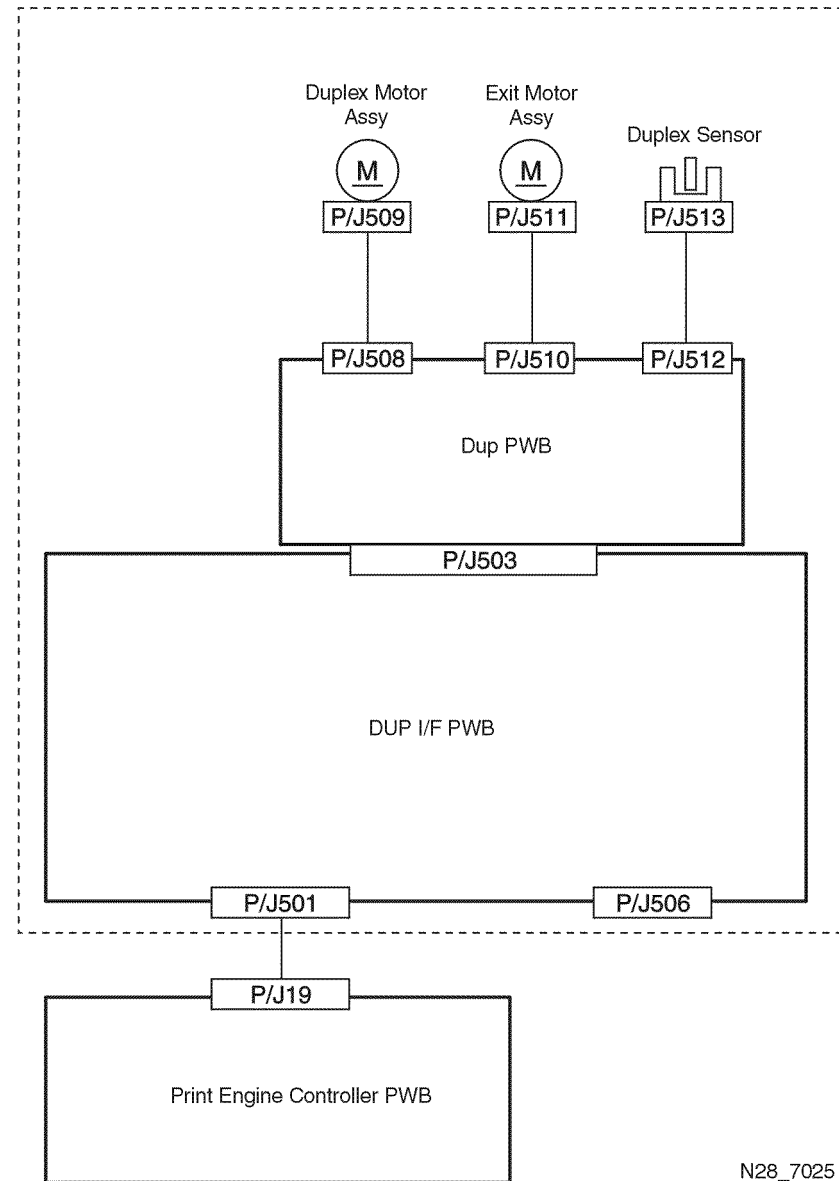
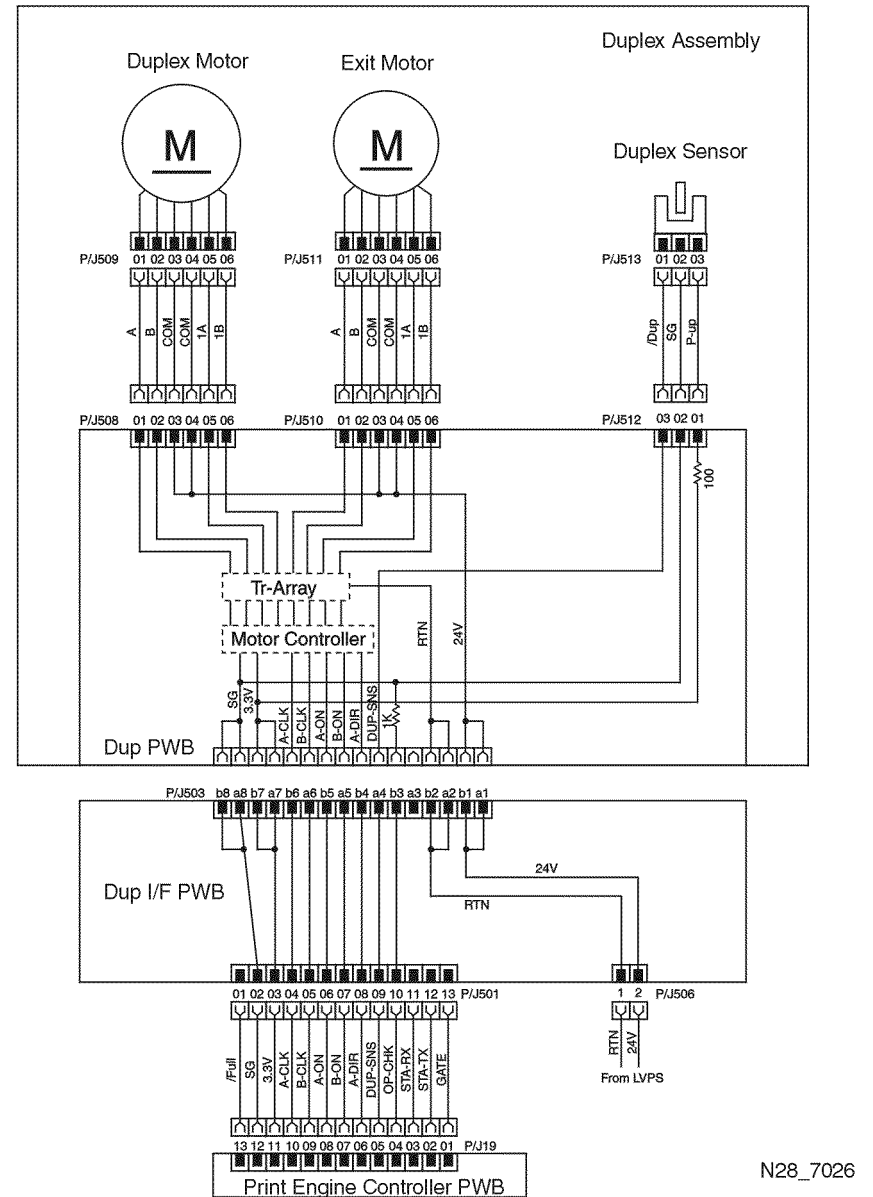


Figure 2 Master Wiring Diagram

Wiring and Signal Information between Components

30. Print Engine Controller PWB <--> Duplex Interface PWB <--> Duplex PWB <--> Duplex Motor Assembly, Exit Motor Assembly and Duplex Sensor Assembly.



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Figure 3

30. Print Engine Controller PWB <--> Duplex Interface PWB <--> Duplex PWB <--> Duplex Motor Assembly, Exit Motor Assembly and Duplex Sensor Assembly

Table 2 Signal names for the Duplex Interface PWB <--> Duplex PWB path

Signal Name	Description
A-CLK	The signal that commands "Low" speed rotation in clockwise of the Duplex Motor Assembly and the Exit Motor Assembly.
B-CLK	The signal that commands "High" speed rotation in clockwise of the Duplex Motor Assembly and the Exit Motor Assembly.
A-ON	The signal activates the Motor, synchronizing with A-CLK signal.
B-ON	The signal activates the Motor, synchronizing with B-CLK signal.
A-DIR	The signal that commands the direction of rotation.
DUP-SNS	The signal from the Sensor Assembly Dup. This signal is "Low" when the paper exists in the Duplex Assembly.

Offset Catch Tray

Location of P/J Connectors

Use the P/J table below (Table 1) and the P/J map (Figure 1) on the next page to locate a specific P/J connector within the Feeder and Cassette.

1. Locate the P/J connector number in the first column of the table (Table 1).
2. Locate the corresponding coordinates in the second column, such as I7 or J7.
3. Go to the map (Figure 1).
4. Cross-reference the letter and number of the P/J coordinates with the letters and numbers on the map.
5. The P/J connector is located within the area where the coordinates cross.

Table 1 P/J Locations

Connector	Coordinate	Description
P/J 514	E6	Connects the STK-0 Harness to the OCT PWB.
P/J 515	F7	Connects the Offset Motor Assembly to the OCT PWB.
P/J 516	J7	Connects the inside the Offset Motor Assembly.
P/J 517	F6	Connects STK Motor Harness to the OCT PWB.
P/J 518	C6	Connects the STK Motor Harness to the OCT Motor Assembly.
P/J 519	J9	Connects the Printer Assembly (Duplex I/F PWB) to the Gate Solenoid.
P/J 520	E6	Connects the STK FLJM Harness to the OCT PWB.
P/J 521	D5	Connects the STK FLJM Harness to the Stack Full Sensor.
P/J 523	G7	Connects the STK FLJM Harness to the OCT Sensor.
P/J 524	E6	Connects the STK COV OP Harness to the OCT PWB.
P/J 525	D5	Connects the STK COV OP Harness to the Interlock Switch.
P/J 526	B8	Connects the STK-0 Harness to the Duplex I/F PWB.

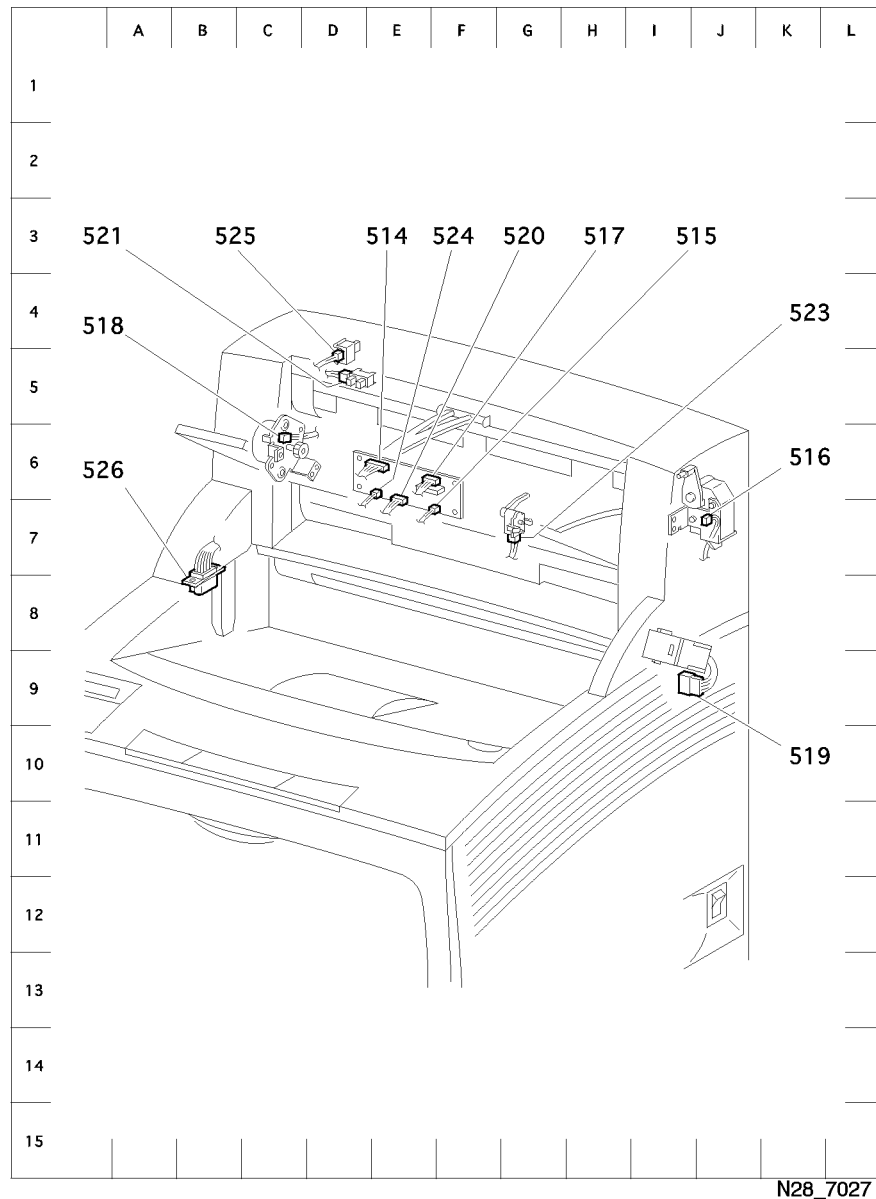


Figure 1 Map

Wiring Diagrams and Signal Information

Contents

This section contains a Master Wiring Diagram for the optional OCT Assembly. The Master Diagram shows the interconnections of the printer, the optional OCT Assembly, and the components of it. The remainder of this section shows the signal names, pin numbers, and other information in detailed diagrams.

Master Wiring Diagram Figure 2

Wiring and Signal Information between Components Figure 3

40. Duplex Interface PWB <--> Stacker PWB <--> OCT Motor Assembly, Offset Motor Assembly, Photo Sensor, Duplex Sensor and Interlock Switch Table 2, Table 3, Table 4, Table 5

Master Wiring Diagram

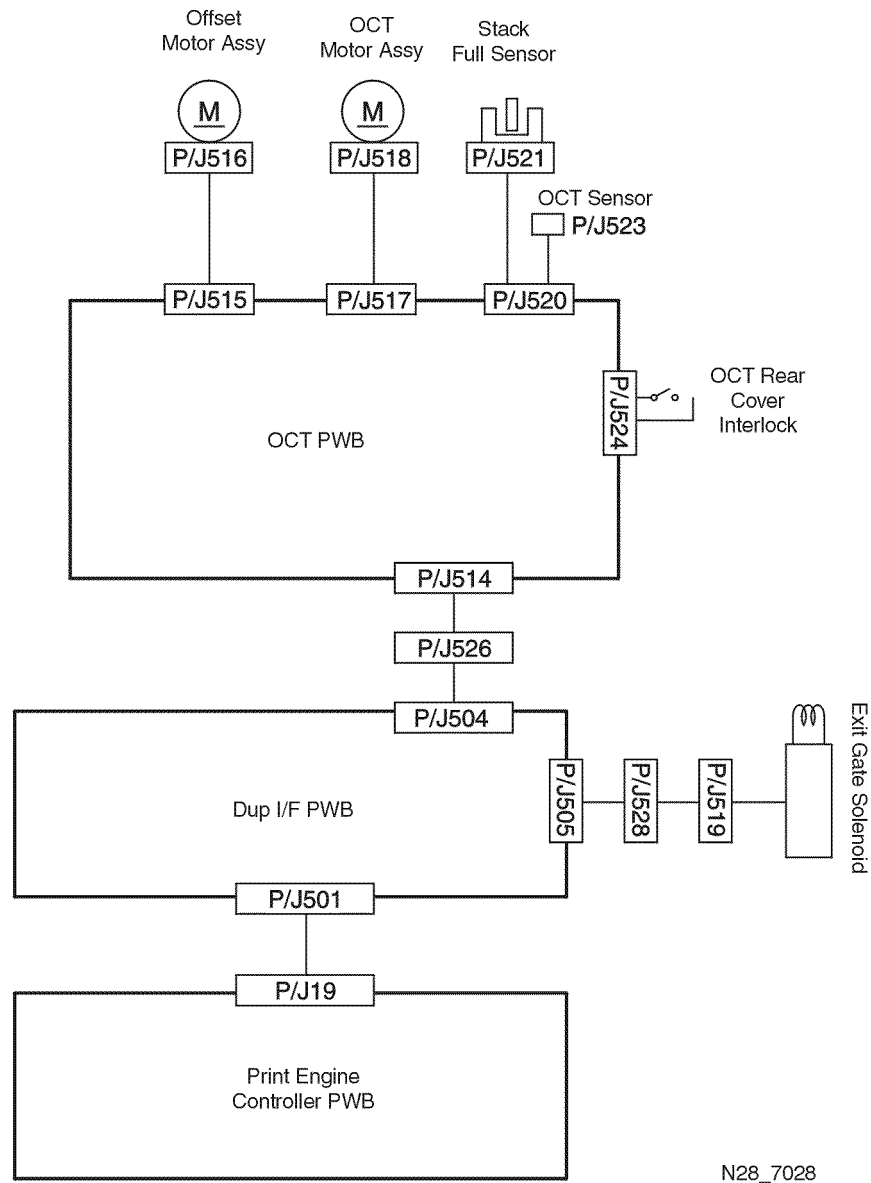
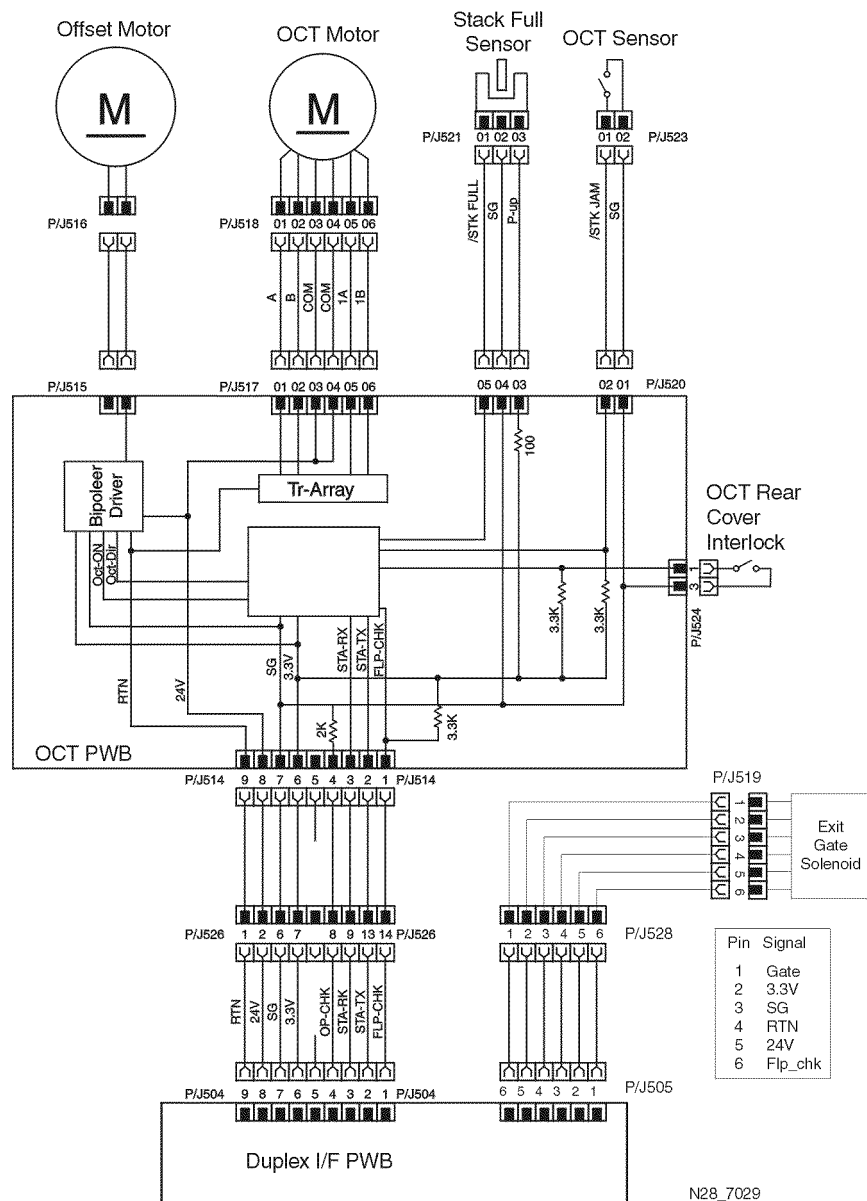


Figure 2 Master Wiring Diagram

Wiring and Signal Information between Components

40. Duplex Interface PWB <--> OCT PWB <--> OCT Motor Assembly, Offset Motor Assembly, Stack Full Sensor, OCT Sensor and Interlock Switch



40. Duplex Interface PWB <--> OCT PWB <--> OCT Motor Assembly, Offset Motor Assembly, Stack Full Sensor, OCT Sensor and OCT Rear Cover Interlock Switch

Table 2 Signal names for the Duplex Interface PWB <--> Stacker PWB path

Signal Name	Description
OP-CHK	Signal that detects the OCT status is ready or not by referring the Interlock Switch and the OCT Sensor. Interlock Switch detects open or close of the OCT Rear Cover and OCT Sensor detects the existence of jammed paper in the OCT Assembly.
STA-RX	Motor control signal
STA-TX	Motor control signal
FRP-CHK	Signal through the Exit Gate Solenoid. This signal informs the Exit Gate Solenoid operation.

40. Duplex Interface PWB <--> OCT PWB <--> OCT Motor Assembly, Offset Motor Assembly, Photo Sensor, OCT Sensor and Interlock Switch

Table 3 Signal names for the OCT PWB <--> OCT Motor Assembly path

Signal Name	Description
A	Activating signal for the OCT Motor Assembly.
B	Activating signal for the OCT Motor Assembly.
/A	Activating signal for the OCT Motor Assembly.
/B	Activating signal for the OCT Motor Assembly.

Table 4 Signal names for the Stacker PWB <--> Photo Sensor path

Signal Name	Description
/STK FULL	Signal through the Stack Full Sensor. This signal is LOW when the Stack Full Sensor is actuated by the stack of delivered printed sheets higher than the predetermined height.
P-UP	Signal through the Stack Full Sensor.

40. Duplex Interface PWB <--> Stacker PWB <--> OCT Motor Assembly, Offset Motor Assembly, Photo Sensor, Duplex Sensor and Interlock Switch

Table 5 Signal names for the Stacker PWB <--> Duplex Sensor path

Signal Name	Description
/STK JAM	Signal through the OCT Sensor. This signal is High when the top of paper reaches the Actuator and pushes it, and Low when the end of paper passes and releases it.

2000 Sheet Feeder

Location of P/J Connectors

Use the P/J table below and the P/J map on the next page to locate a specific P/J connector within the Feeder and Cassette. To find the location of a P/J:

1. Locate the P/J connector number in the first column of the table.
2. Locate the corresponding coordinates in the second column, such as I7 or J7.
3. Go to the map.
4. Cross-reference the letter and number of the P/J coordinates with the letters and numbers on the map.
5. The P/J connector is located within the area where the coordinates cross.

Table 1 P/J Table

Connector	Coordinate	Description
J131	B7	Connects the 2000 Sheet Feeder-1 Harness to the IOT Directly Connect or Under the Feeder 2.
P/J 601	I5	Connects the 2000 Sheet Feeder-1 Harness to the 2000 Sheet Feeder PWB.
P/J 602	J5	Connects the 2000 Sheet Feeder NPS Harness to the 2000 Sheet Feeder PWB.
P/J 603	J5	Connects the 2000 Sheet Feeder FRDY Harness to the 2000 Sheet Feeder PWB.
P/J 604	J4	Connects the 2000 Sheet Feeder SW Harness to the 2000 Sheet Feeder PWB.
P/J 605	I5	Connects the Elevation Motor to the 2000 Sheet Feeder PWB.
P/J 606	I4	Connects the 2000 Sheet Feeder FDM Harness to the 2000 Sheet Feeder PWB.
P/J 607	J4	Connects the 2000 Sheet Feeder TFM Harness to the 2000 Sheet Feeder PWB.
P/J 608	H9	Connector' inside the Elevation Motor.
P/J 609	H9	Connects the 2000 Sheet Feeder FDM Harness to the Feed Motor.
P/J 610	E8	Connects the 2000 Sheet Feeder NPS Harness to the No Paper Sensor.
P/J 611	F8	Connects the 2000 Sheet Feeder FRDY Harness to the Paper Level Sensor.
P/J 612	G10	Connects the 2000 Sheet Feeder SW Harness to the A4/Letter Switch.
P/J 613	H8	Connects the 2000 Sheet Feeder SW Harness to the Read Cover Open Switch.
P/J 614	F9	Connects the 2000 Sheet Feeder SW Harness to the Cassette Indicator Switch.
P/J 615	C8	Connects the 2000 Sheet Feeder TFM Harness to the Drive Assembly Motor.

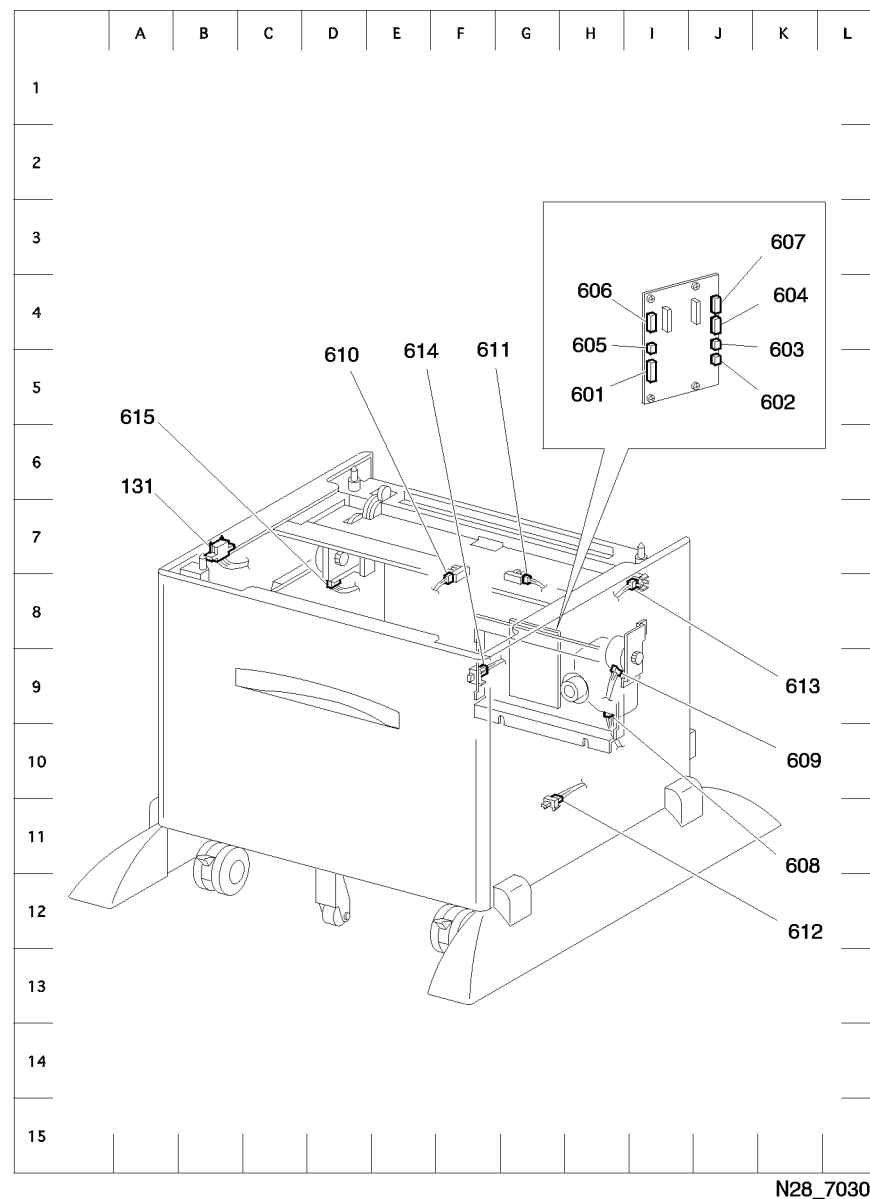


Figure 1 P/J Map

Wiring Diagrams and Signal Information

Contents

This section contains a Master Diagram for the 2000 Sheet Feeder Assembly. The Master Diagram shows the interconnections of the printer, the 2000 Sheet Feeder Assembly, and the components of the 2000 Sheet Feeder Assembly. The remainder of this section shows the signal names, pin numbers, and other information in detailed diagrams.

Master Wiring Diagram Figure 2

Wiring and Signal Information Between Components Figure 3, Table 2

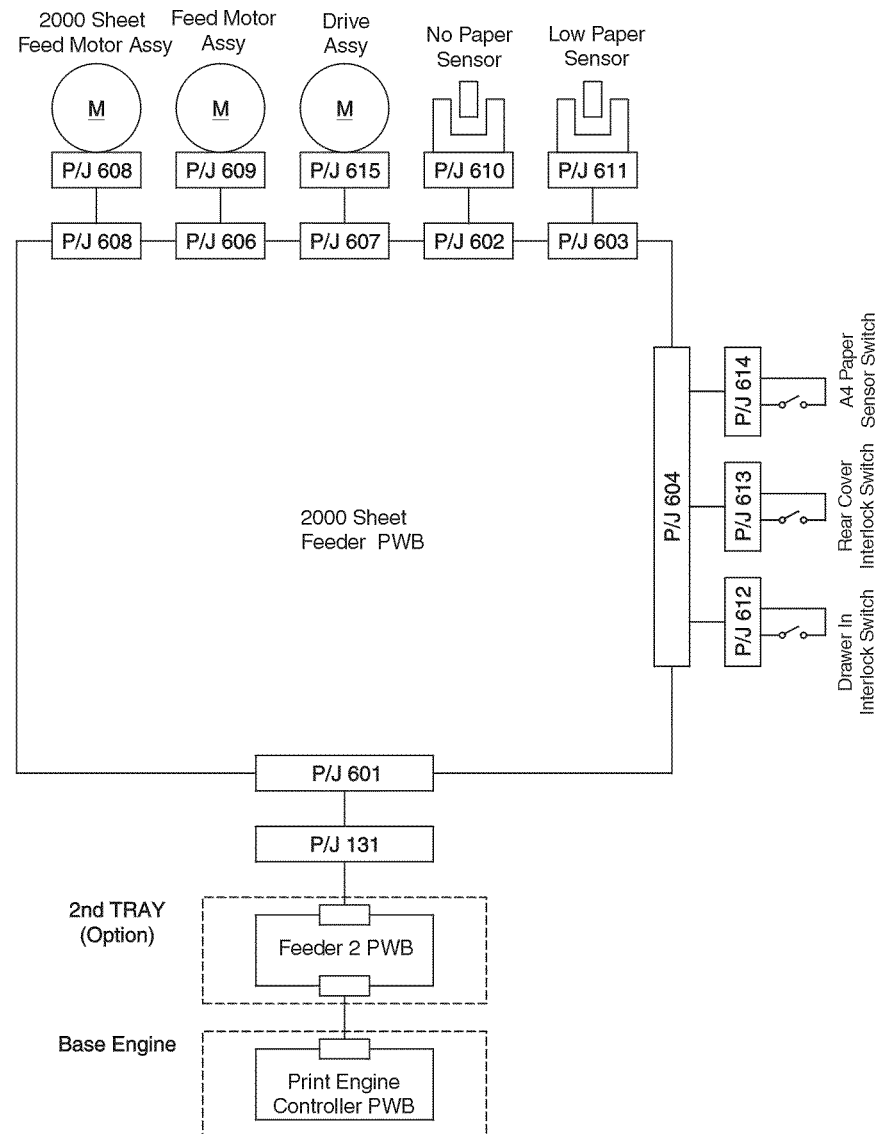
50. Print Engine Controller PWB <--> 2000 Sheet Feeder PWB <--> Motor Assembly 2000 Sheet Feeder, Motor Assembly Feed, Drive Assembly Turn

50. 2000 Sheet Feeder PWB <--> No Paper Sensor Figure 4, Table 3

50. 2000 Sheet Feeder PWB <--> Low Paper Sensor Figure 5, Table 4

50. 2000 Sheet Feeder PWB <--> Switches (A4/letter, Rear Cover, and Cassette In) Figure 6

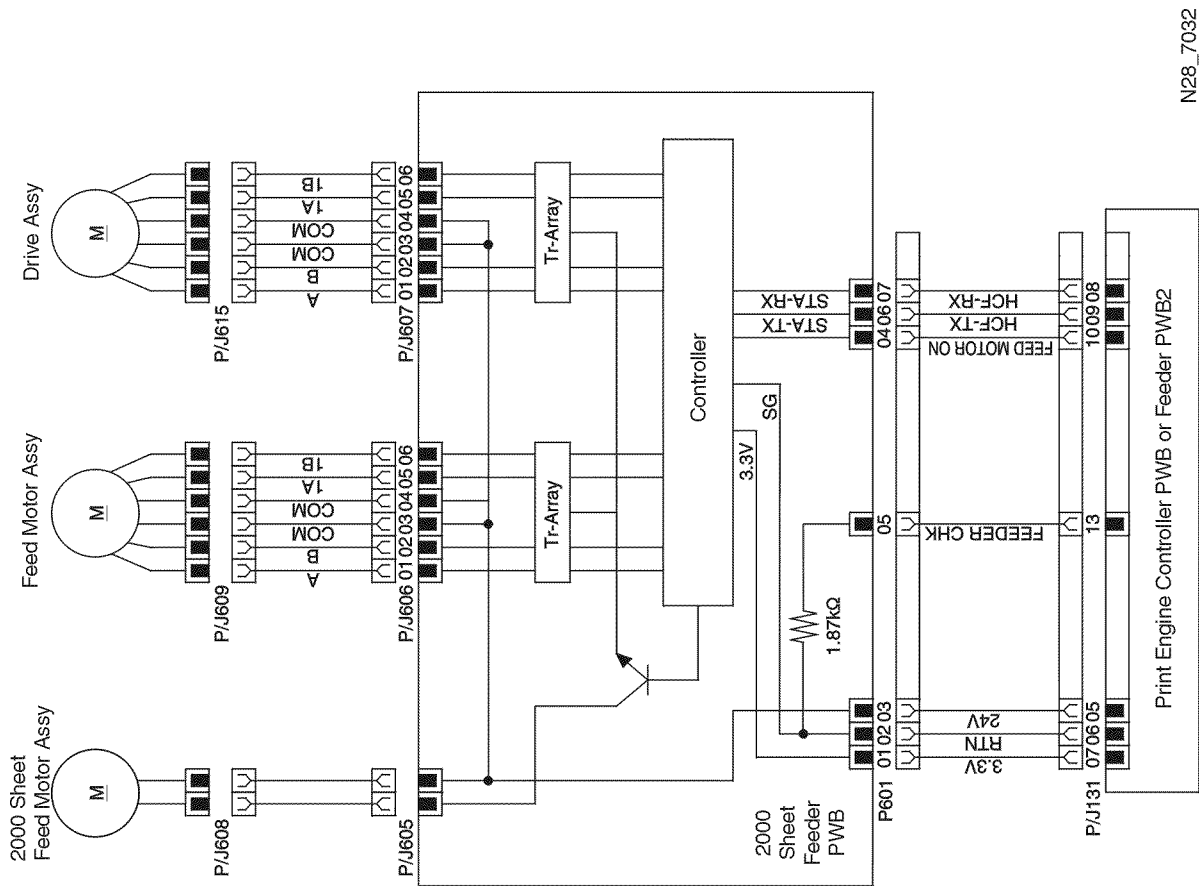
Master Wiring Diagram



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Figure 2 Master Wiring Diagram

50. Print Engine Controller PWB <--> 2000 Sheet Feeder PWB <--> Motor Assembly 2000 Sheet Feeder, Motor Assembly Feed, Drive Assembly Turn



N28_7032

Figure 3 Wiring/Signal Information Between Components

Table 2 Signal names for the Print Engine Controller PWB <--> 2000 Sheet Feeder PWB <--> Motor Assembly 2000 Sheet Feeder, Motor Assembly Feed, Drive Assembly Turn path

Signal Name	Description
FEEDER-CHK	Resistance that informs which the 2000 Sheet Feeder is installed as the 500 Sheet Feeder or not.
FEED MOTOR ON	Motor control signal
2000 Sheet Feeder-TX	Transmitted data from the Print Engine Controller PWB to the 2000 Sheet Feeder
2000 Sheet Feeder-TX	Received data from the 2000 Sheet Feeder to the Print Engine Controller PWB
A	Motor control signal
B	Motor control signal
/A	Motor control signal
/B	Motor control signal

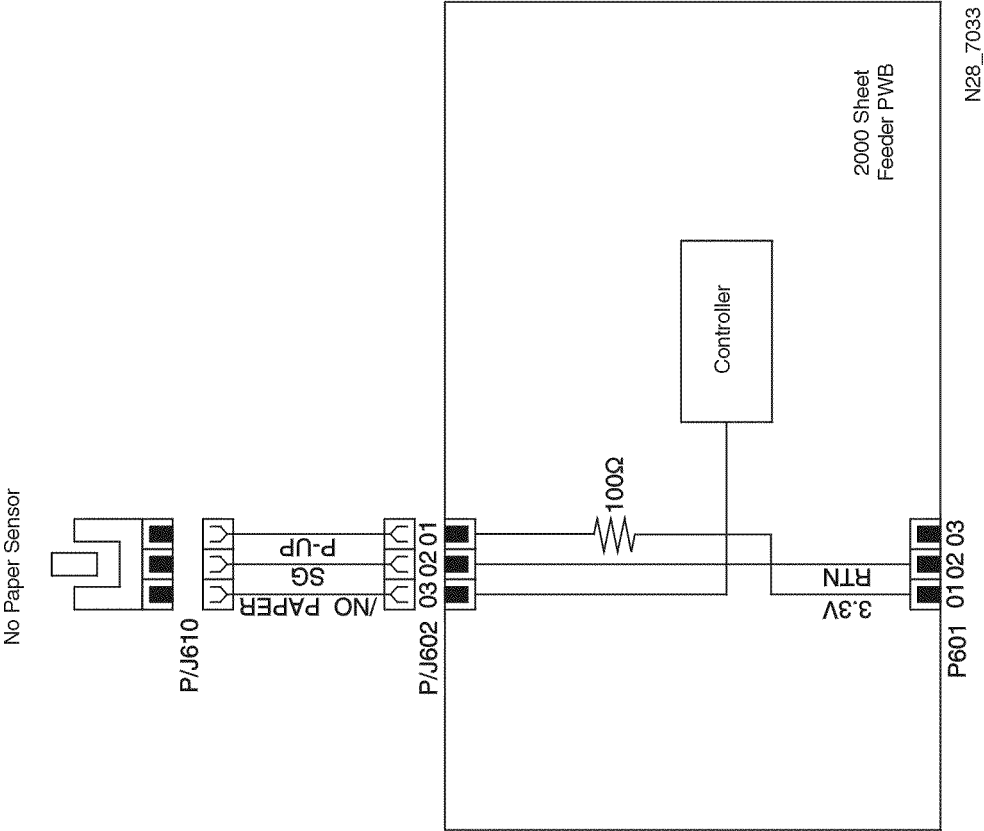


Figure 4 50. 2000 Sheet Feeder PWB <--> No Paper Sensor

50. 2000 Sheet Feeder PWB <--> No Paper Sensor

Table 3 Signal names for the 2000 Sheet Feeder PWB <--> No Paper Sensor path

Signal Name	Description
/NO PAPER	Signal from the No Paper Sensor. This signal is Low when the Photo Sensor is actuated.

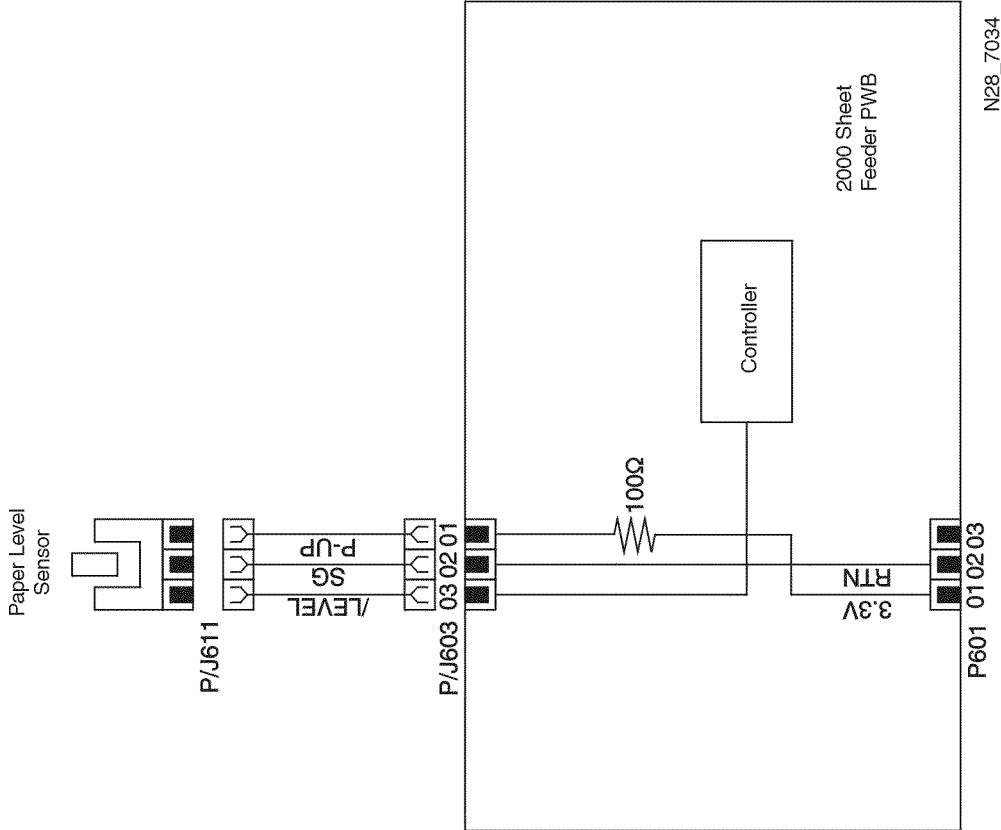


Figure 5 2000 Sheet Feeder PWB/Photo Sensor

Table 4 Signal names for the 2000 Sheet Feeder PWB <--> Low Paper Sensor path

Signal Name	Description
/LEVEL	Signal from the Low Paper Sensor. This signal is Low when the Photo Sensor is actuated.

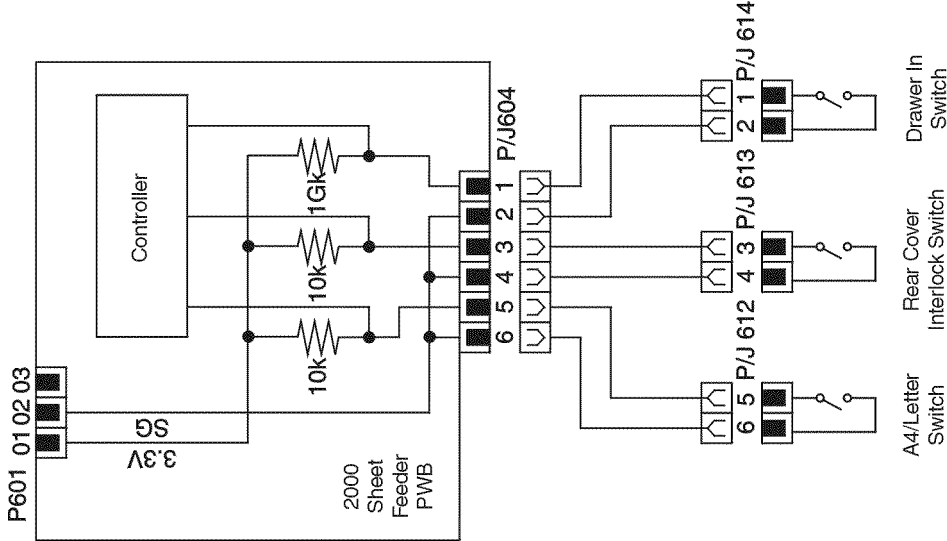


Figure 6 2000 Sheet Feeder PWB/Switches

The Switch (A4/Letter) detects the paper size, A4 or Letter, with the position of the Side Guide L of the OCT Tray Assembly. The Switches (rear Cover and Cassette In) are the interlock switches. If one of the contacts of these Switches is open, the 24V circuit is broken.