



## *Service Manual*

**Optra™ N Finisher Option**

**4040-FIN**

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# 1. General Information

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## Maintenance Approach

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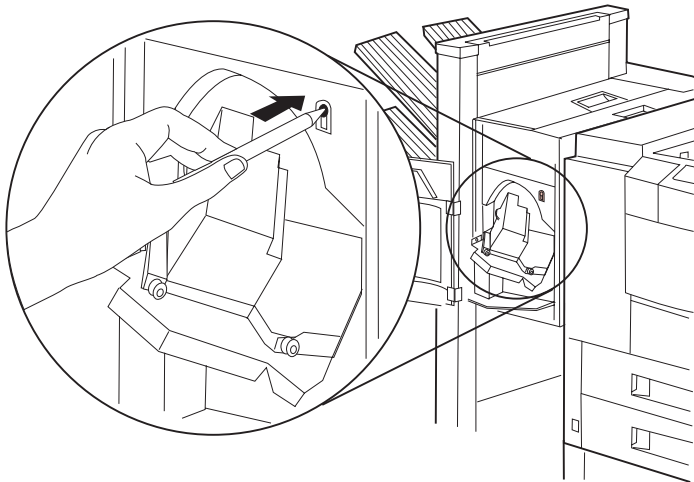
The diagnostic information in this manual leads you to the correct field replaceable unit (FRU) or part. Use the error code charts, symptom index, and service checks to determine the symptom and repair the failure.

After you complete the repair, perform tests as needed to verify the repair.

### Stapler Test

The stapler test must be run after a new staple cartridge has been installed.

1. Be sure Side is selected from the output bin menu so jobs are directed to the finisher, and Staple is set to Staple 1 or Staple 2.
2. Use the tip of a ballpoint pen or similar object to press the test button.



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3. Close the stapler access door. Press Continue to Perform Staple Test appears on the operator panel display.
4. Select CONTINUE from the printer operator panel. Performing Staple Test appears on the display. When the test page is delivered to the finisher, the finisher puts several staples along one edge of the page. This primes the stapler for future jobs and improves stapling reliability.

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## Tools

The removal and adjustment procedures described in this manual require the following tools and equipment:

- Magnetic tip Phillips screwdrivers, large and small
- Flat-blade screwdriver
- Analog volt ohmmeter (a digital volt ohmmeter may also be used).
- Oiler
- Grease
- Cleaning tissue
- Ruler

When you make voltage readings, always use frame ground unless another ground is specified.

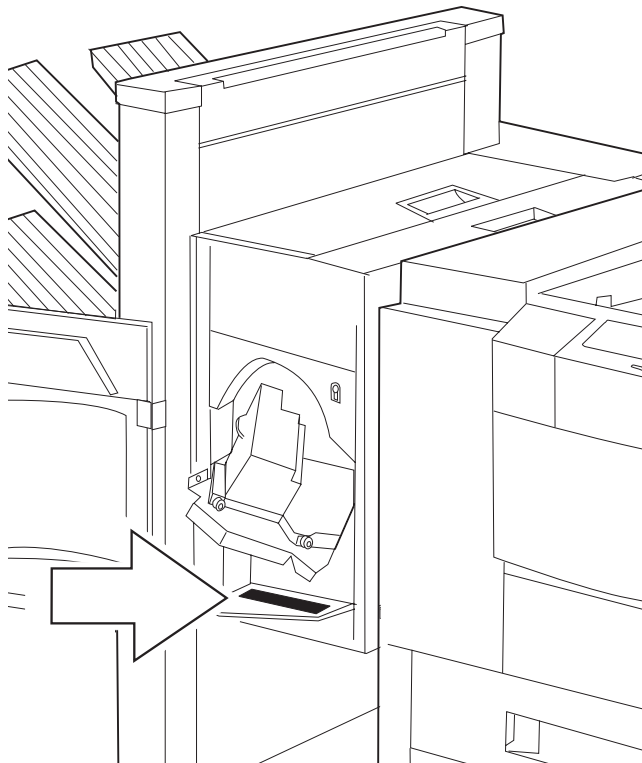
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## Abbreviations

ASIC	Application-Specific Integrated Circuit
CSU	Customer Setup
DRAM	Dynamic Random Access Memory
EEPROM	Electrically Erasable Programmable Read-Only Memory
EP	Electrophotographic Process
ESD	Electrostatic Discharge
FRU	Field Replaceable Unit
HVPS	High Voltage Power Supply
LAN	Local Area Network
LASER	Light Amplification by Stimulated Emission of Radiation
LCD	Liquid Crystal Display
LED	Light-Emitting Diode
LVPS	Low Voltage Power Supply
NVRAM	Nonvolatile Random Access Memory
OEM	Original Equipment Manufacturer
PICS	Problem Isolation Charts
PIXEL	Picture Element
POR	Power-On Reset
POST	Power-On Self Test
PQET	Print Quality Enhancement Technology
RIP	Raster Image Processor
ROS	Read-Only Storage
SRAM	Static Random Access Memory
UPR	Used Parts Replacement
VAC	Volts alternating current
VDC	Volts direct current

## 2. Diagnostic Information

Use the serial number from the indicated label to identify the machine for reporting service related activity.



The diagnostic information in this chapter leads you to the failing part. Before you replace an entire assembly, determine if just the defective part is available in the parts catalog. Some diagnostic procedures indicate the parts catalog location of the part to be checked by including the assembly number and reference number in parenthesis. Some part numbers are also included. Use the error code tables, symptom table, service checks and the diagnostic aids chapter to determine the symptom and repair the failure. After you complete the repair, perform the appropriate tests to verify the repair.

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If an error is displayed, locate it in the following Operator Error Message Table, or the Service Error Message Table and take the appropriate action.

If an error message appears while you are working on the finisher, go to the error message table and take the indicated action.

If you are in doubt whether the problem is with the printer or the finisher, unplug the finisher and see if the printer performs normally.

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## Start

### Initial Check

Before you start troubleshooting, check the following:

#### Installation Environment

- The power supply line voltage is plus or minus 10% of the rated line voltage.
- The machine is securely installed on a level surface in a well-ventilated place.
- The room temperature is between 10 and 32°C (50 and 90°F) and the relative humidity between 20 and 80%.
- Avoid sites generating ammonia gas, high temperature or high humidity (near water faucets, kettles, humidifiers), cold spaces, near open flames, and dusty areas.
- Avoid sites exposed to direct sunlight.

#### Print Paper Checks

- Be sure the recommended paper for this printer is being used.
- Check the paper for dampness. Make a trial print with paper from a newly opened package, and check the result.

#### Other

If you move the finisher into a warm room from a cold location such as a warehouse, various problems can occur due to condensation if it is immediately unpacked. If condensation should appear, either wipe the relevant parts with a dry cloth, or leave the finisher power on for 10 to 20 minutes.

## Operator Error Message Table

If you have a paper jam, be sure to clear all paper from the finisher, paper deck, and printer. If you are unable to clear an operator error code for a paper jam; note the location of the paper jam and check the paper sensor for that station. See **“Switches” on page 4-4** or **“Sensors” on page 4-5**. If the sensors are working properly, see the **“Service Checks” on page 2-10** for other mechanical failures. If no paper is present you must open a finisher cover to clear the error code.

Message	Action
30 Finisher Door Open (MS1, MS7)	Be sure the finisher top cover, right access door, and stapler access door are completely closed. If the error does not clear, check the door switches and replace if necessary.
31 Finisher Interlock Open (PI-15)	Be sure the finisher is positioned snugly against the printer and the latches on either side of the finisher are snapped in place. If the error does not clear, check the interlock sensor. Replace if necessary.
41 Paper Jam (PI-1)	There is a paper jam in the input area, right access door. If the error code does not reset after you clear the paper jam, go to the <b>“Paper Jam, 41, Paper Input Service Check” on page 2-12</b> . If there is still a problem after that, go to the <b>“Symptom Table” on page 2-7</b> .
42 Paper Jam (PI-2)	There is a paper jam at the right access door. If the error code does not clear after you clear the paper jam, go to the <b>“Paper Jam, 42, Reversing Paper Sensor Service Check” on page 2-13</b> . If there is still a problem after that, go to the <b>“Symptom Table” on page 2-7</b> .



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Message	Action
43 Paper Jam (PI-3)	There is a paper jam at the top cover. If the error code does not clear after you clear the paper jam, go to the <b>"Paper Jam, 43, Delivery Paper Sensor Service Check"</b> on page 2-13. If there is still a problem after that, go to the <b>"Symptom Table"</b> on page 2-7.
44 Paper Jam (PI-4)	There is a paper jam at the staple tray or output bins 1, 2, or 3. If the error code does not clear after you clear the paper jam, go to the <b>"Paper Jam, 44, Staple Tray Paper Sensor Service Check"</b> on page 2-13. If there is still a problem after that, go to the <b>"Symptom Table"</b> on page 2-7.
45 Staple Jam	The printer has detected a staple jam in the finisher. See the User's Guide.
47 Finisher Bin X Full	Empty the output bin identified in the message and select CONTINUE.
48 Top Output Bin Full	Empty the top output bin and select CONTINUE. If this doesn't correct the problem, go to the Optra N Service Manual.
49 Output Bins Full	All three output bins are full. Empty all three bins as well as the top output bin, if Top Bin Linking is set on. Then select CONTINUE. If this doesn't correct the problem, go to the <b>"Distance Detecting Sensor Service Check"</b> on page 2-10.

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<b>Message</b>	<b>Action</b>
89 Staples Low	The finisher has 10 or fewer staples remaining in the staple cartridge. The Staple Alarm must be set to Single or Continuous for this message to appear. If Auto Continue is On when the printer detects this error, the printer waits 30 seconds for the condition to be corrected and then continues normal operation. Select CONTINUE to resume printing.
90 Staples Empty	The finisher is out of staples. The Staple Alarm must be set to Single or Continuous for this message to appear. Select CONTINUE to resume printing.

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### Service Error Message Table

Error	Symptom or Message	Action
938	Finisher Option Controller Card, No response	Be sure the power cord and interface cable are securely plugged in. POR the printer. If there is still a failure, replace the finisher option controller card (PN 11D00326) located on the printer controller board.  If there is still a problem, replace the finisher driver board (PN 11D0294).
951	The delivery motor requires service.	Go to the <b>"Paper Delivery Motor Service Check"</b> on page 2-11.
952	The stapler assembly requires service.	Be sure the stapler is clear of jams and the staple cartridge is properly installed and tested. PORA the machine if the stapler is not in the home position. If there is still a problem, go to the <b>"Stapler Motor Service Check"</b> on page 2-16.
954	The adjusting plate requires service.	Go to the <b>"Stapler Shift Motor Service Check"</b> on page 2-16.
955	The finisher output bin assembly has had a vertical movement failure.	Go to the <b>"Tray Height Service Check"</b> on page 2-18.
956	The shutter requires service.	Go to the <b>"Shutter Service Check"</b> on page 2-15.
957	The swing guide requires service.	Go to the <b>"Swing Guide Service Check"</b> on page 2-17.
958	The paper full sensor requires service.	Go to the <b>"Distance Detecting Sensor Service Check"</b> on page 2-10.
959	The stapler motor requires service.	Go to the <b>"Stapler Motor Service Check"</b> on page 2-16.
962	The shift motor requires service.	Go to the <b>"Stapler Shift Motor Service Check"</b> on page 2-16.

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### Symptom Table

Symptom	Action
Dead finisher. "Finisher Output Option Missing" displays on the printer operator panel when you enter the paper menu selection.	Check the power cords and interface cables. Go to the "Power Service Check" on page 2-14.
Paper fails to enter finisher and the paper feed motor does not run.	Go to the "Paper Feed Motor Service Check" on page 2-12.
The paper feed motor runs but the paper fails to complete reversing or face down delivery.	Go to the "Reversing Roller Service Check" on page 2-15.
Paper fails to exit swing guide or stapler tray.	Go to the "Paper Delivery Service Check" on page 2-11.

### Testing the Finisher

To run paper through the finisher from the printer:

1. Select **MENUS**.
2. Select **PAPER MENU**.
3. Scroll until you have the option you want and be sure it is on and saved.
4. Return to Ready.
5. Select **MORE**.
6. Select **TEST MENU**.
7. Select **Print Fonts**, or **Print Test Page**.
8. Do not use **Continuous** for staple or offset because there is no end of job.
9. Be sure to reset the customer settings when you have completed the repair.

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### Power On Reset (POR) Sequence

When sensors, motors, or solenoids malfunction during POR no errors are reported from the following sequence except for 1, 2, 3, and 27. To be sure the finisher successfully completes POR you must observe the sequence of events.

Confirm that the tray home position sensor (P18) is operating normally. Measure the voltage between connectors J12-5 and J12-6 on the finisher driver board. It should be approximately 5 V when the tray assembly is in the home position, and 0 V, in other positions.

1. The top cover/front cover are checked. If it is open, POR stops.
2. Residual paper is checked for. If paper is present, POR stops.
3. Checks whether the position of the tray assembly is within the safety range or not. If it is not in the safety range, POR stops.
4. The swing guide closes.
5. The shutter closes.
6. The tray assembly returns to the home position.
7. The shutter opens.
8. The swing guide opens.
9. The alignment plate moves to the home position.
10. The alignment plate moves to the alignment position for A4-vertical size paper.
11. The alignment plate returns to the home position.
12. The alignment plate rotates for 1.5 seconds, and the paddle solenoid turns on 0.75 seconds after the paper feed motor turns on.
13. The left edge withdrawal solenoid turns off for 0.5 seconds, on for 0.5 seconds, and off for 0.5 seconds.
14. The paper feed motor rotates for 4.0 seconds. The reversing solenoid turns on 2.0 seconds after the paper feed motor turns on.
15. The swing guide closes.
16. The shutter closes.
17. The tray assembly lifts until tray 3 is positioned at the paper delivery slot.
18. The tray assembly returns to the home position.
19. Data is collected from the distance detecting sensor.

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20. The face-up flapper solenoid turns off for 0.5 seconds, on for 0.5 seconds, and off for 0.5 seconds.
21. The stapler assembly returns to the home position.
22. The stapler assembly moves to the stapling position A4R-size paper, one point at the corner.
23. The stapler returns to the home position.
24. The staple motor rotates in reverse to return to the stapling operation home position.
25. The staple motor rotates until the stapling operation goes out of the home position.
26. The staple motor rotates in reverse until it enters the stapling operation home position.
27. Checks for staples. If there are no staples, an error is indicated.
28. The shutter opens and the POR is complete.

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## Service Checks

### Alignment Plate Shift Motor Service Check

1	Connector	Be sure J11 is properly connected to the finisher driver board.
2	Alignment Plate Shift Motor, M2, (5-21)	Unplug J11 from the finisher driver board. Measure the resistance between J11-1 and J11-2/ -3/ -4/ -5 on the motor side. If it does not read approximately 16 Ohms, replace the alignment plate shift motor (PN 11D0162).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Distance Detecting Sensor Service Check

	FRU	Action
1	Connector J6	Be sure the distance detecting sensor signal line connector (J6) on the finisher driver board is properly connected.
2	Distance Detecting Sensor, PS1 (3-26)	Measure the voltage between J6-4 (GND) and J6-2 (Vcc)/-3(Vin) on the finisher driver board. If it is not 5 V, replace the distance detecting sensor (PN 11D0074).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

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### Paper Delivery Motor Service Check

1	Connector	Be sure the J8 and J11 are properly connected to the finisher driver board, and the stapler assembly is properly installed and firmly plugged in.
2	Paper Delivery Motor, M3, (5-8)	Unplug J11 from the finisher driver board. Measure the resistance between J11-6 and J11-7 on the motor side. If it does not read 42 Ohms, replace the paper delivery motor (PN 11D0142).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Paper Delivery Service Check

1	Gears	Check for and replace any broken or worn gears in the swing guide and stapler tray assembly.
2	Delivery Roller 1 and Delivery Roller 2 (6-25, 6-44)	Check delivery rollers 1 and 2 for wear or damage. Replace as necessary (PN 11D0188, 11D0194).
3	Delivery Roller 1 Drive Belts (6-26)	Check the delivery roller 1 drive belts for damage and proper tracking on delivery roller 1. Replace if necessary (PN 11D0189).
4	Staple Tray Guide Stops (6-41, 6-30)	Be sure the staple tray guide stops are not damaged. Also be sure they are positioned correctly. If they are positioned to the rear of the normal pivot point, they will not pivot to the normal rest position. Replace as necessary (PN 11D0207, 11D0202).
5	Reversing Shafts (7-27)	Be sure the swing guide reversing shafts are not damaged. Also be sure they properly push paper into the staple tray when offsetting or stapling jobs (PN 11D0228).
6	Swing Guide Exit Pressure Rollers. (7-7)	Check for and replace any damaged swing guide exit pressure rollers (PN 11D0216).



## 4040 Finisher

### Paper Feed Motor Service Check

1	Connector	Be sure the J10 is properly connected to the finisher driver board.
2	Paper Feed Motor, M1, (4-43)	Unplug J10 from the finisher driver board. Measure the resistance between J10-1 and J10-4/ -6 and between J10-2 and J10-3/ -5 on the motor side. If it does not read 4.3 Ohms, replace the paper feed motor (PN 11D0118).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Paper Jam, 41, Paper Input Service Check

Clear all paper from the paper deck, printer, and finisher. If there is no paper you must open and close one of the finisher covers to clear the error.

1	Input Paper Sensor Flag (1-4)	Open the right access door and check the operation of the flag (PN 11D0015) for the paper input sensor (PI-1).
2	Input Paper Sensor, PI-1, (3-10)	Check the voltage of J13-3 on the finisher driver board. There should be 5 V when the sensor is activated (PN 11D0071).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

## 4040 Finisher

### Paper Jam, 42, Reversing Paper Sensor Service Check

Clear all paper from the paper deck, printer, and finisher. If there is no paper you must open and close one of the finisher covers to clear the error.

1	Reversing Paper Sensor Flag (4-27)	Open the right access door and check the operation of the flag (PN 11D0121) for the reversing paper sensor (PI-2).
2	Reversing Paper Sensor, PI-2, (3-10)	Check the voltage of J12-3 on the finisher driver board. There should be 5 V when the sensor is activated (PN 11D0071).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Paper Jam, 43, Delivery Paper Sensor Service Check

Clear all paper from the paper deck, printer, and finisher. If there is no paper you must open and close one of the finisher covers to clear the error.

1	Paper Delivery Sensor Flag (5-15)	Check the flag for the delivery sensor (PI-3) by opening the top cover and raising the upper paper guide (label 1). Replace the flag if necessary.
2	Paper Delivery Sensor, PI-3 (5-13)	Check the voltage of J9-11 on the finisher driver board. There should be 0 V when the sensor is activated (PN 11D0151).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Paper Jam, 44, Staple Tray Paper Sensor Service Check

Clear all paper from the paper deck, printer, and finisher. If there is no paper you must open and close one of the finisher covers to clear the error.

1	Staple Tray Paper Sensor Lever (6-24)	Check the delivery paper sensor lever by raising the swing guide up and sliding a sheet of paper over the sensor lever. Replace the lever if necessary (PN 11D0187).
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## 4040 Finisher

2	Staple Tray Paper Sensor, PI-4, (5-1)	Check the voltage of J9-3 on the finisher driver board. There should be 0 V when the sensor is activated (PN 11D0071).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

## Power Service Check

Be sure the correct voltage is available at the power outlet, and the power plug is firmly plugged into the printer, paper deck, and finisher.

	FRU	Action
1	Interface Connector	Be sure the interface cable (PN 11D0305) connector is properly connected.
2	<ul style="list-style-type: none"><li>Option Controller Board</li><li>Printer Controller Board</li></ul>	Turn the printer on. Measure the voltage between J4-7 (PWRON-IN) and J4-11 (GND) on the finisher board. If it does not measure approximately 5 V, replace the option controller board (PN 11D0326). If this does not fix the problem, replace the printer controller board.
3	Fuse	Remove the power supply and replace the fuse (PN 11D0343) if necessary.
4	Power Supply (3-1)	Turn the printer off and remove the finisher power cord. Be sure J1 is plugged into the finisher driver board. Plug the power cord into the finisher power supply and turn the printer on. Measure the DC power supply through connector J1. Be careful not to short it. If the voltage on J1-1 is not approximately 5 V, and the voltage on J1-2, -4 does not measure approximately +24 V, replace the power supply (PN 11D0076).
5	Finisher Driver Board (13-1)	Turn off the printer and check the lines and DC loads from J1 on the finisher driver board. There should be 0 V on J1-1 or J1-2, -4. If there is voltage, replace the finisher driver board (PN 11D0294).

## 4040 Finisher

### Reversing Roller Service Check

1	Gears	Check for, and replace any broken or worn gears.
2	Reversing Solenoid, SL7 (4-20)	Unplug J14 of the reversing solenoid. Measure the resistance between J14-1 and J14-2 on the solenoid side. If it does not read 125 Ohms, replace the reversing solenoid (PN 11D0114).
3	Paper Feed Motor, M1 (4-43)	Set the DIP switch (SW1) on the finisher driver board so that 3 is on. Press the push switch (SW3) to execute mechanical checking. If the paper feed motor does not rotate, replace it (PN 11D0118).
4	Finisher Driver Board	If there is still a problem, replace the finisher driver board (PN 11D0294).
5	Paper Deck Driver Board	If there is still a problem, replace the paper deck driver board (PN 11A8461).
6	Option Controller Board	If there is still a problem, replace the option controller board (PN 11D0326).
7	Printer Controller Board	If there is still a problem, replace the printer controller board (PN 11A8254).

### Shutter Service Check

	FRU	Action
1	Connectors	Be sure J7, J9, and J10 are properly connected to the finisher driver board.
2	Shutter Close Detection Sensor, PI-5 (2-23)	Unplug J7 from the finisher driver board. Measure the resistance between J7-1 and J7-2 on the switch side. If it does not measure infinity with the shutter down, replace the shutter close sensor (PN 11D0071).
3	Shutter Open Detection Sensor, PI-5 (2-23)	Measure the voltage between J9-8 and J9-9 on the finisher driver board. If it is not 0 V with the shutter up, or not approximately 5 V with the shutter down, replace the shutter open sensor (PN 11D0071).
4	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

## 4040 Finisher

### Stapler Motor Service Check

1	Connector	Be sure J8 is properly connected to the finisher driver board.
2	Stapler Motor	Unplug J8 from the finisher driver board. Measure the resistance between J8-11 and J8-12 on the motor side. If it does not read 10 Ohms, replace the stapler motor assembly (PN 11D0344).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Stapler Shift Motor Service Check

1	Connector	Be sure J8 is properly connected to the finisher driver board.
2	Staple Shift Motor, M4 (12-5)	Unplug J8 from the finisher driver board. Measure the resistance between J8-5 and J8-1/-2/-3/-4 on the motor side. If it does not read 16.5 Ohms, replace the staple shift motor (PN 11D0269).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

## 4040 Finisher

### Swing Guide Service Check

	FRU	Action
1	Connectors	Be sure J5, J11, and J13 are properly connected to the finisher drive board.
2	Swing Guide Close Detecting Switch, MS-2 (5-6)	Unplug J5 from the finisher driver board. Measure the resistance between J5-9 and J5-10 on the switch side. If the resistance is not 0 Ohms with the swing guide down, or infinity with the swing guide up, replace the swing guide close detecting switch (PN 11D0139).
3	Swing Guide Close Sensing Switch, MS-6 (5-6)	Unplug J5 from the finisher driver board. Measure the resistance between J5-11 and J5-12 on the switch side. If the resistance is not 0 Ohms with the swing guide down, or infinity with the swing guide up, replace the swing guide close sensing switch (PN 11D0139).
4	Swing Guide Open Sensor, PI-18 (5-1)	Measure the voltage between J13-5 and J13-6 on the finisher driver board. If it is not 0 V with the swing guide down, and not 5 V with the swing guide up, replace the swing guide open sensor (PN 11D0071).
5	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

### Tray Elevation Motor Service Check

1	Connector	Be sure J7 is properly connected to the finisher driver board.
2	Tray Elevation Motor, M5 (9-16)	Unplug J7 from the finisher driver board. Measure the resistance between J7-4 and J7-5 on the motor side. If it does not read 5.5 Ohms, replace the tray elevation motor (PN 11D0254).
3	Finisher Driver Board (13-1)	If there is still a problem, replace the finisher driver board (PN 11D0294).

## 4040 Finisher

### Tray Height Service Check

	FRU	Action
1	Connectors	Be sure J5, J7, and J12 are properly connected to the finisher driver board.
2	Tray Home Position Sensor, PI-8 (3-10)	Measure the voltage between J12-5 and J12-6 on the finisher driver board. If it is not 5 V with the tray in the home position, or 0 V in the other positions, replace the tray home position sensor (PN 11D0071).
3	Tray Upper Limit Detection Switch, MS-5 (3-33)	Unplug J5 from the finisher driver board. Measure the resistance between J5-7 and J5-8 on the switch side. If it is not 0 Ohms, replace the tray upper limit detection switch (PN 11D0064).
4	Safety Range Detection Switch, MS-3 (3-36)	Measure the voltage between J5-1 and J5-5/ -6 on the finisher driver board. Raise the tray until it clicks two or three times. If the voltage does not change from 24 V to 0 V or from 18 V to 24 V, replace the safety range detection switch (PN 11D0068).  If there is still a problem, go to the <b>“Tray Elevation Motor Service Check”</b> on page 2-17.

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## 3. Repair Information

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### Adjustments

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#### Distance Sensor Adjustment

The distance sensor is adjusted during manufacturing so you do not need to adjust it when you install it. However, the distance sensor must be initialized when the finisher driver board or the distance sensor is replaced. To initialize the distance sensor:

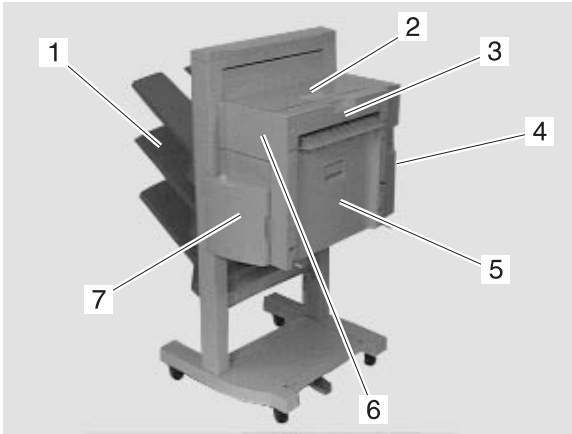
1. Confirm that the voltage of the Lithium battery on the finisher driver board is over 2.7 V.
2. Set the DIP switch (SW1) on the finisher driver board to 1: OFF, 2: OFF, 3: OFF, 4: ON.
3. Load a sheet of blank paper in Bins 1, 2 and 3.
4. Press the push switch (SW2) so that tray 1 moves to the initialization position. When the initialization of the distance sensor is completed, the tray assembly descends to the home position.
5. Set the DIP switch (SW1) to 1: OFF, 2: OFF, 3: OFF, 4: OFF, and confirm that LED on the finisher driver board flashes ON for 0.5 seconds, OFF for 0.3 seconds.



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## Cover Removal Procedures

### External Covers



1. Trays
2. Top Door
3. Top Cover
4. Rear Cover
5. Right Cover
6. Front Cover
7. Front Door

## 4040 Finisher

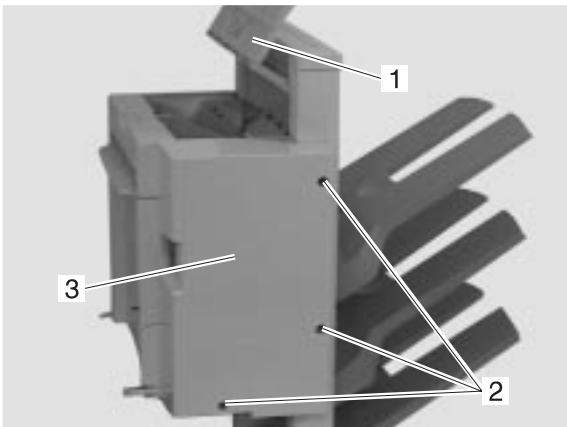
### Front Door Removal

1. Open the front door (1).
2. Remove the screw (2) and bracket (3), then the front door.



### Rear Cover Removal

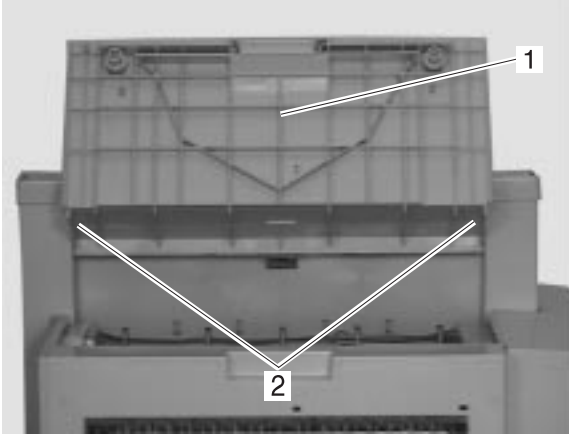
1. Open the top door (1).
2. Remove the 3 screws (2) and lift the rear cover (3) to remove it.



## 4040 Finisher

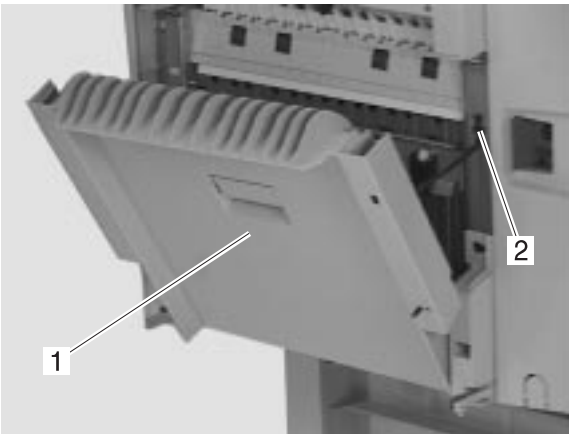
### Top Door Removal

1. Open the top door (1).
2. Remove the 2 latches (2), then the top door.



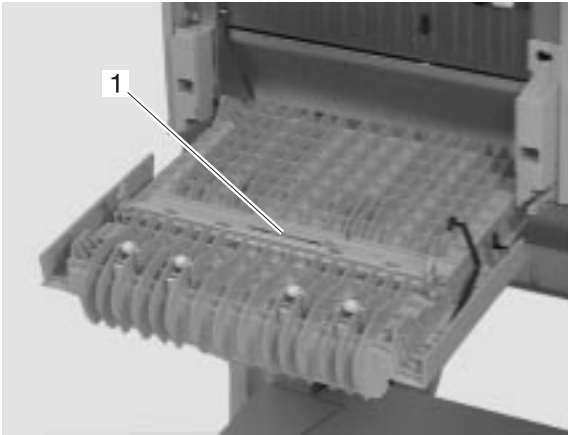
### Right Cover Removal

1. Open the right cover (1)
2. Remove the hinge (2).



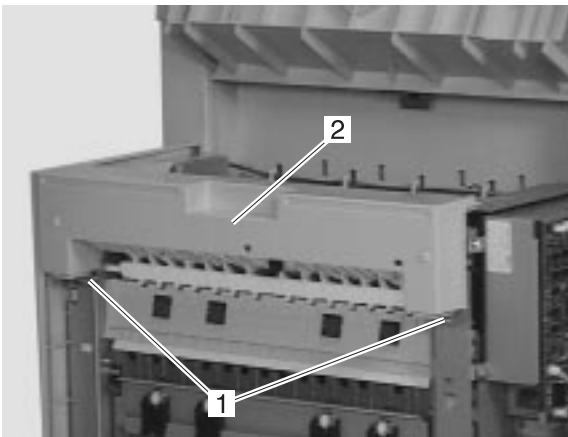
## 4040 Finisher

3. Pull out the right cover (1).



## Top Cover Removal

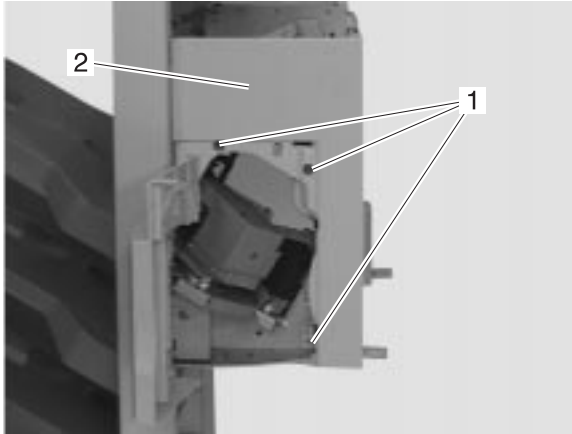
1. Open the top cover.
2. Remove the rear cover.
3. Open the right cover.
4. Remove the 2 latches (1) and lift the top cover (2) to remove it.



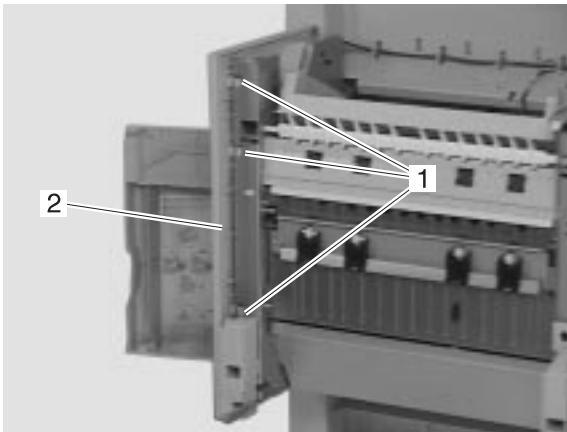
## 4040 Finisher

### Front Cover Removal

1. Remove the 3 screws (1) from the front cover (2).



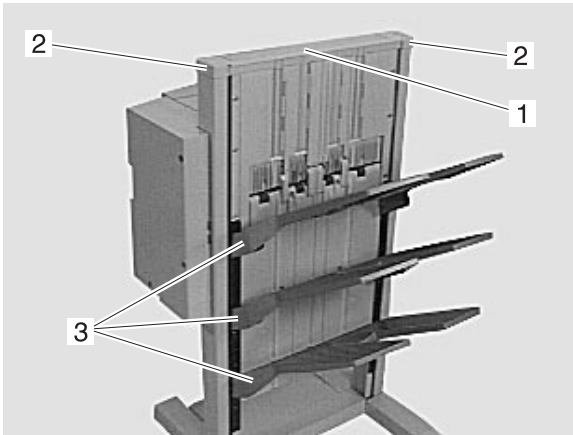
2. Remove the 3 latches (1), then the front cover (2).



## 4040 Finisher

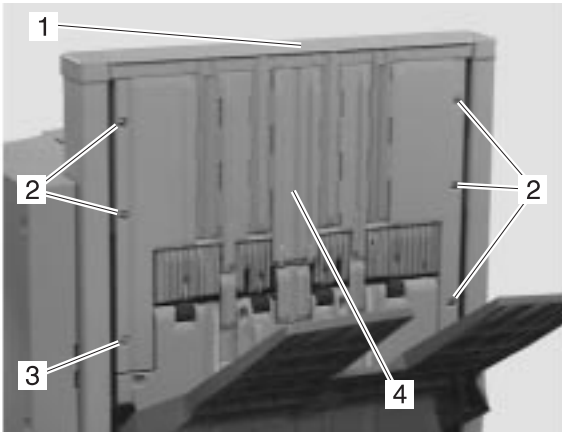
### Tray Removal

1. Remove the slide guide (1).
2. Remove the 2 stoppers (2).
3. Lift the tray (3) to remove it.



### Top Guide Removal

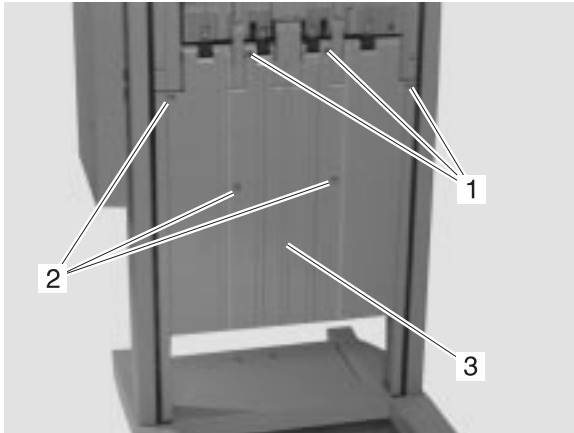
1. Remove the slide guide (1).
2. Remove the 5 screws (2).
3. Remove the screw (3), then remove the grid top guide (4).



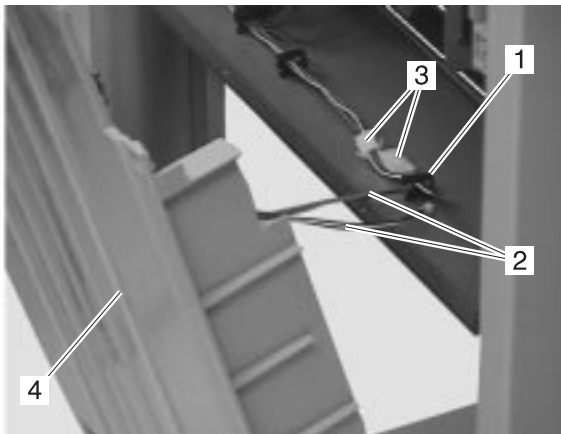
## 4040 Finisher

### Bottom Guide Removal

1. Remove the tray.
2. Remove the 3 screws (1).
3. Remove the 3 screws (2) and pull the bottom guide (3).



4. Remove the cable (2) from the cable guide (1).
5. Disconnect the 2 connectors (3) and remove the bottom guide (4).



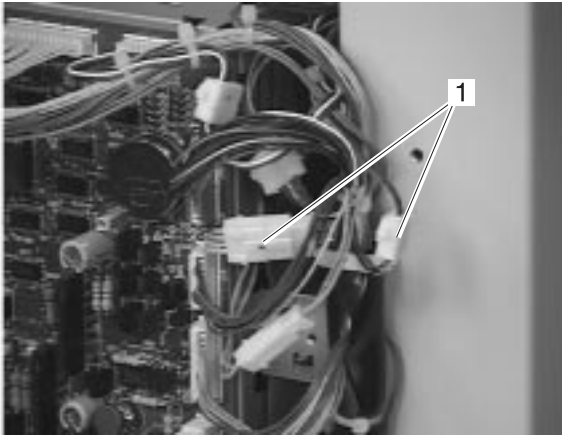
When you replace the bottom guide be sure it is completely seated in the frame. This will prevent binds that could cause the shutter to give error codes.

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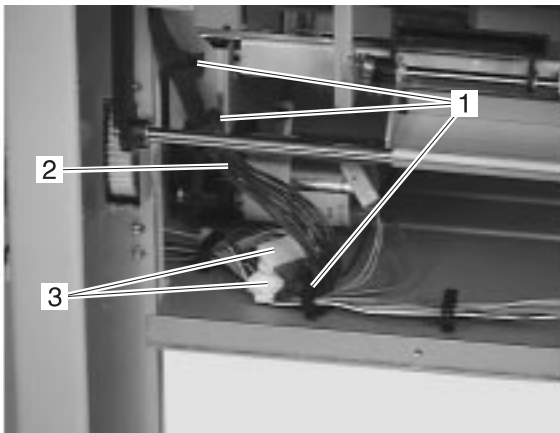
## Paper Transport Removal Procedures

### Staple Tray Removal

1. Remove the rear cover.
2. Remove the top and bottom guides.
3. Disconnect the 2 connectors (1).



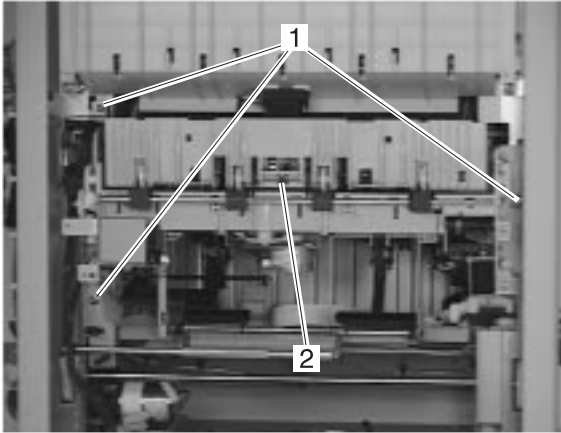
4. Remove the cable (2) from the cable guides (1).
5. Disconnect the 2 connectors (3).





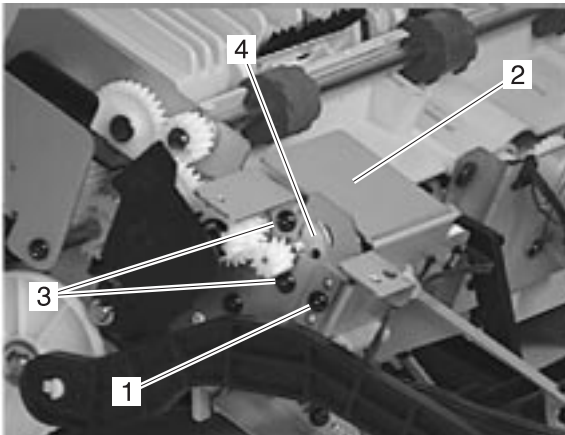
## 4040 Finisher

6. Remove the 3 screws (1), then the staple tray (2).



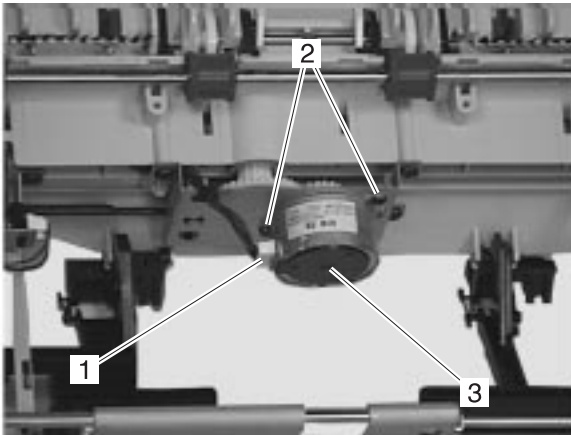
## Staple Tray Delivery Motor Removal

1. Remove the screw (1), then the motor cover (2).
2. Remove the 2 screws (3), then the delivery motor (4).



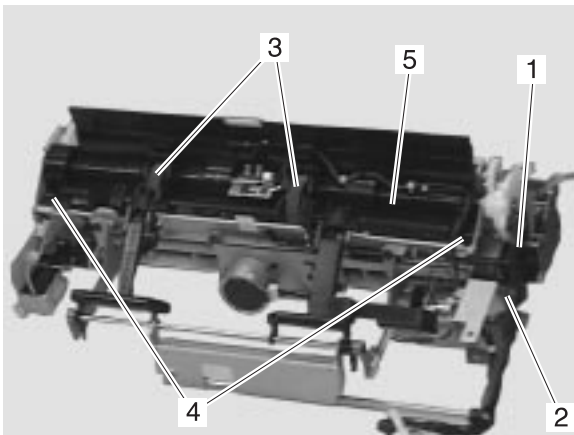
## Staple Tray Alignment Plate Shift Motor Removal

1. Disconnect the connector (1).
2. Remove the 2 screws (2), then the alignment plate shift motor (3).



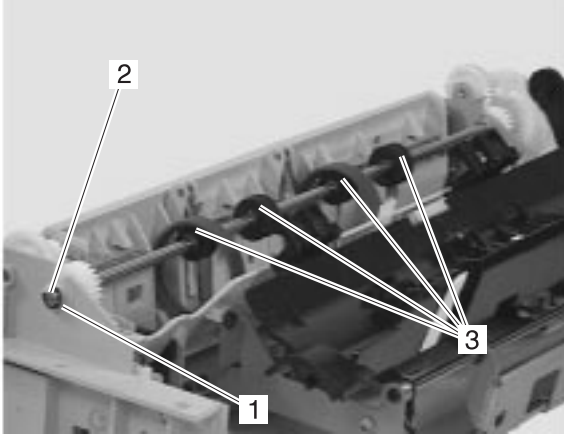
## Staple Tray Delivery Roller 1 Removal

1. Remove the latch (1), then the arm (2).
2. Remove the 2 rollers (3).
3. Remove the 2 screws (4), then the staple guide (5).

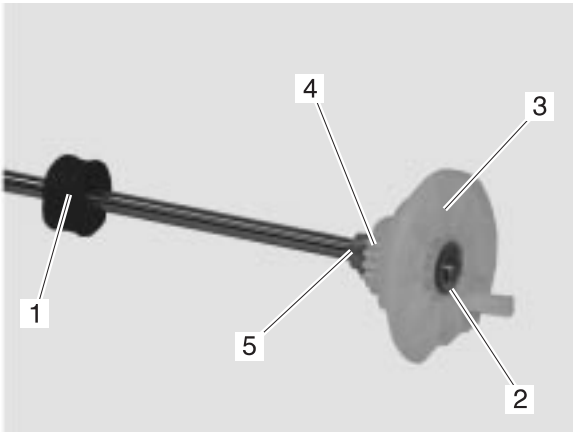


## 4040 Finisher

4. Remove the C-clip (1), then the bushing (2).
5. Slide the delivery rollers (3) to the left to remove them.

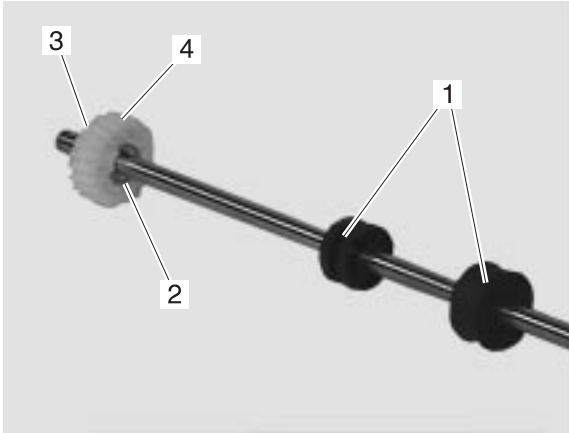


6. Remove the C-clip (2) from the delivery roller (1), then the cam (3), gear (4), pin, and the bushing (5).



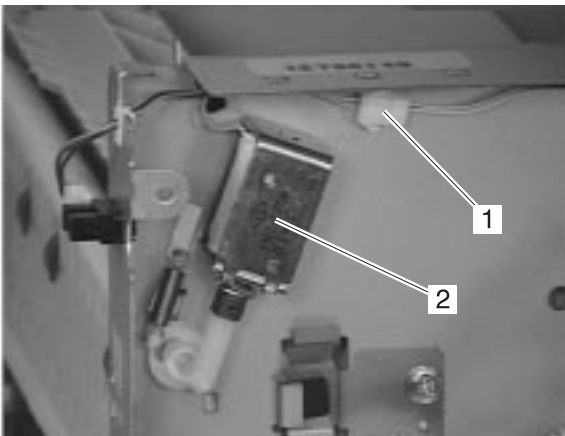
## 4040 Finisher

7. Remove the C-clip (2) from the delivery roller (1), then the pin (3), and the gear (4).



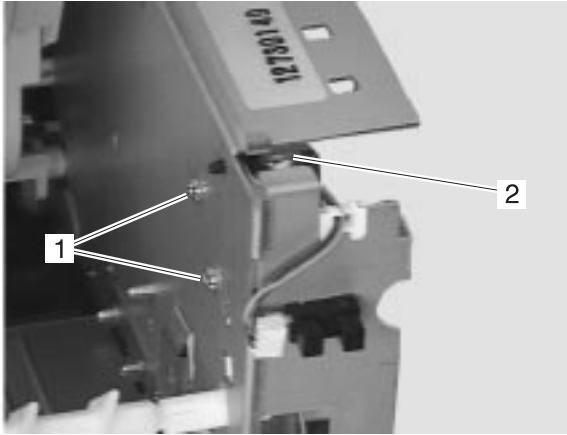
## Face-up Solenoid Removal

1. Remove the rear cover and the top cover.
2. Remove the finisher driver board.
3. Remove the power supply.
4. Disconnect the connector (1).
5. Locate the solenoid (2).



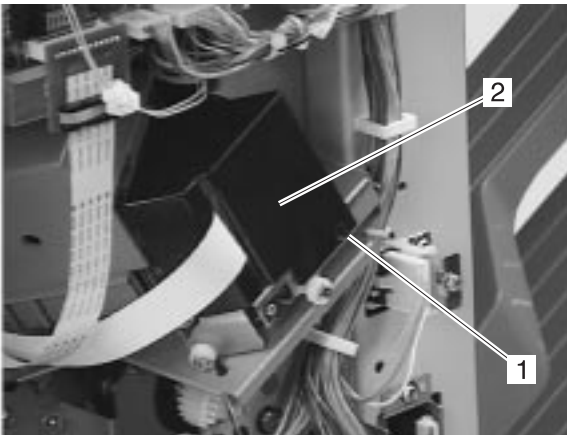
## 4040 Finisher

6. Remove the 2 screws from inside the main unit, then the face-up flapper solenoid (2).



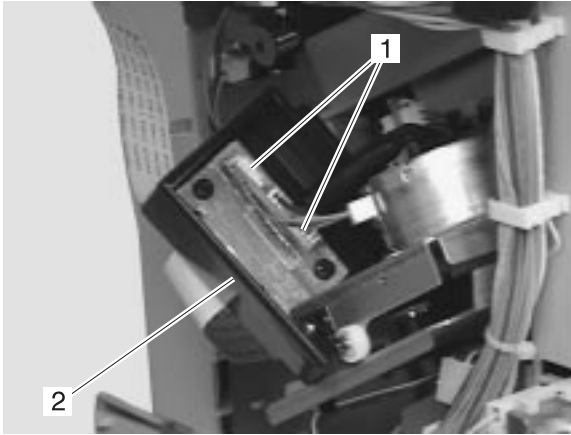
## Staple Assembly Removal

1. Remove the rear cover.
2. Remove the screw (1), then the board cover (2).

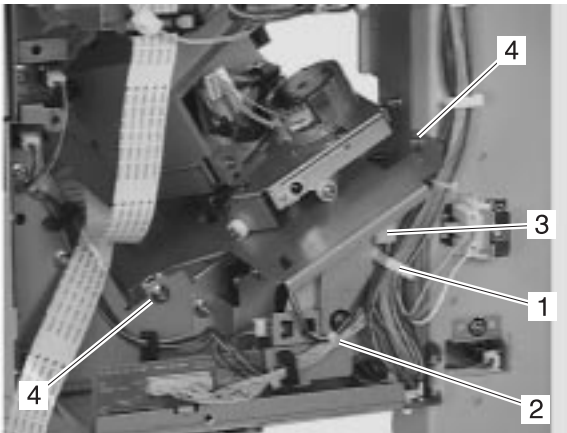


## 4040 Finisher

3. Disconnect the 2 connectors (1) from the staple tray motor card (2).

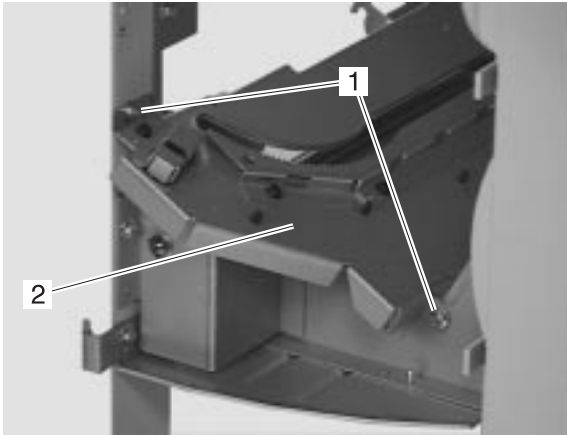


4. Remove the staple assembly.
5. Release the cable guide (1) and remove the cable band (2), then disconnect the connector (3).
6. Remove the 2 screws (4).



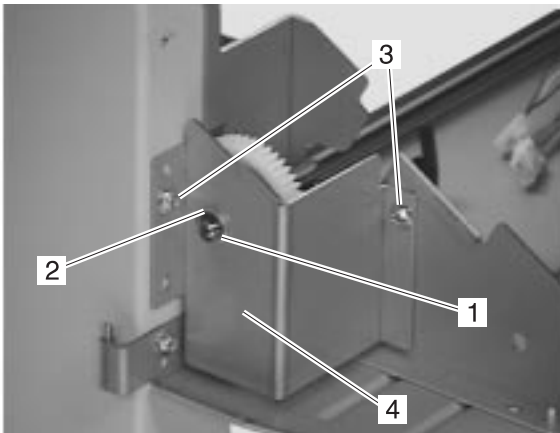
## 4040 Finisher

7. Remove the 2 screws (1), then the staple assembly (2).



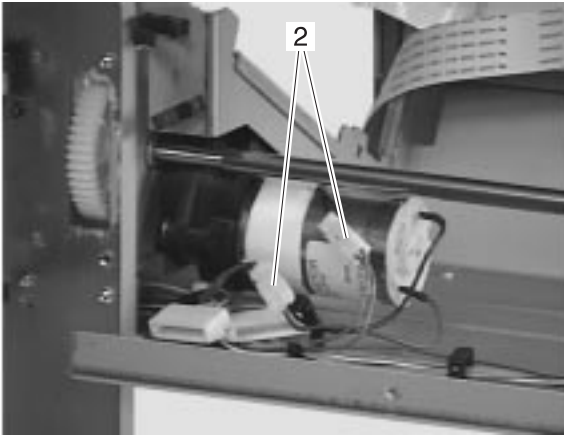
## Tray Assembly Drive Removal

1. Remove the staple assembly.
2. Remove the C-clip (1), then the bushing (2).
3. Remove the 2 screws (3), then the cover (4).

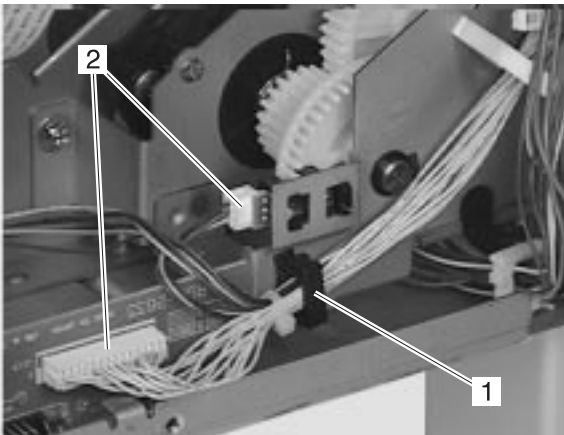


## 4040 Finisher

4. Disconnect the 2 connectors (2).



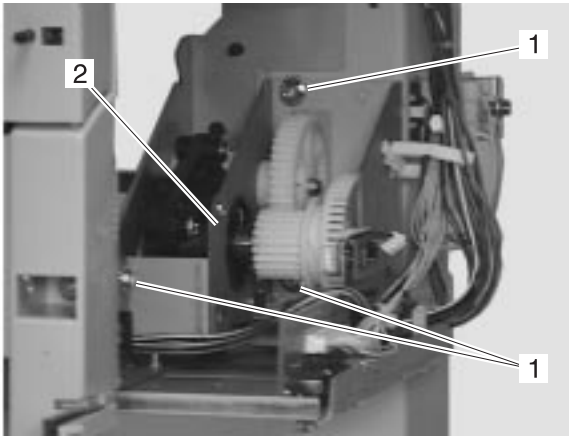
5. Release the cable guide (1).
6. Disconnect the 2 connectors (2).





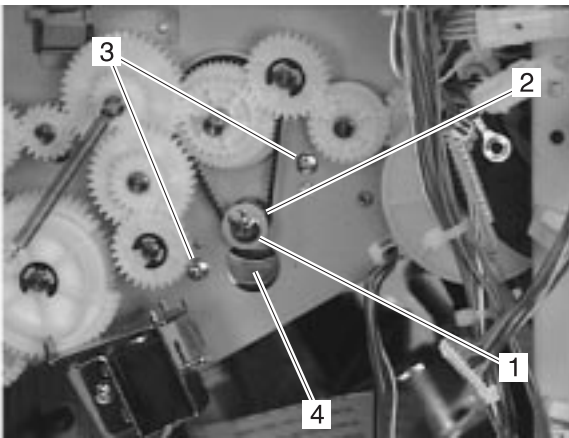
## 4040 Finisher

7. Remove the 3 screws (1), then the tray assembly drive (2).



## Paper Feed Motor Removal

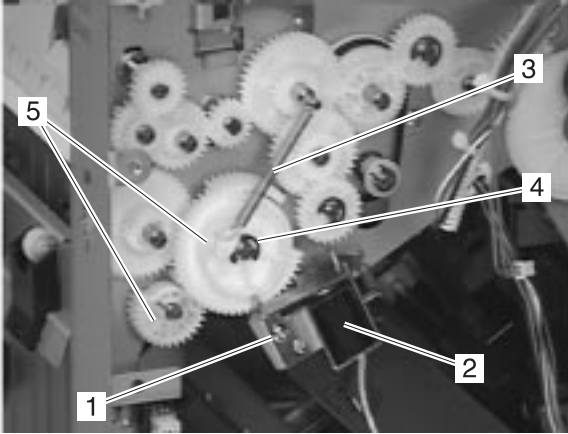
1. Remove the power supply with the finisher driver board on it.
2. Remove the C-clip (1), then the gear (2).
3. Remove the 2 screws (3) and remove the paper feed motor (4) from the inside.



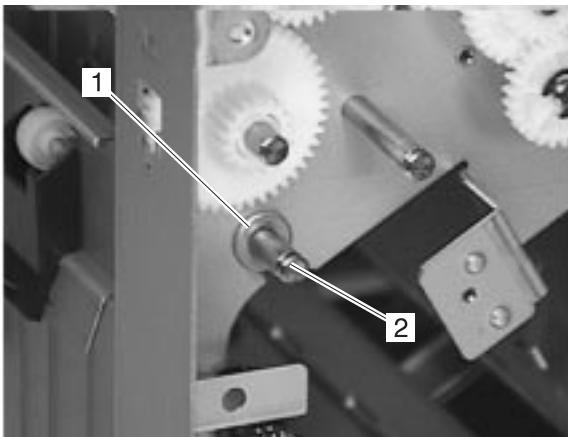
## 4040 Finisher

### Reversing Roller Removal

1. Remove the power supply with the finisher driver board on it.
2. Remove the screw (1), then the reversing solenoid (2),
3. Remove the spring (3).
4. Remove the C-clip (4), then the 2 gears (5).



5. Remove the bushing (1) from the reversing roller shaft (2).



## 4040 Finisher

6. Remove the spring hook (1), then the spring (2).
7. Remove the C-clip (3), the bushing (4), then the reversing roller (5).

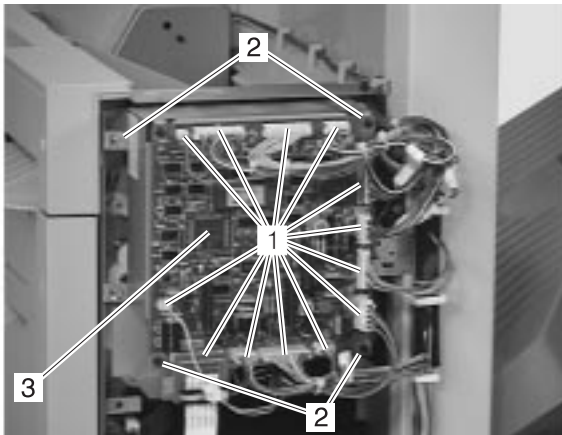


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## Electrical Components Removal Procedures

### Driver Board Removal

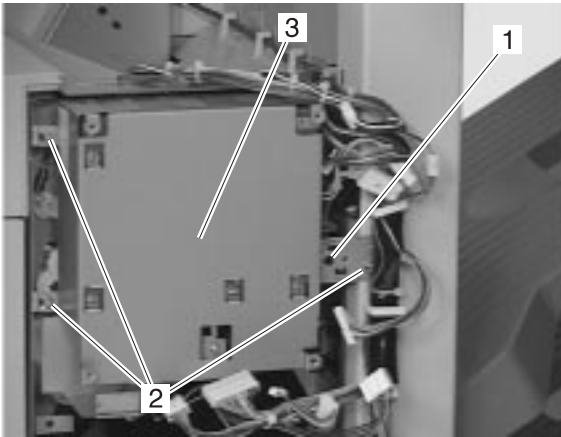
1. Remove the rear cover.
2. Disconnect the 13 connectors (1).
3. Remove the 4 screws (2), then the finisher driver board (3).



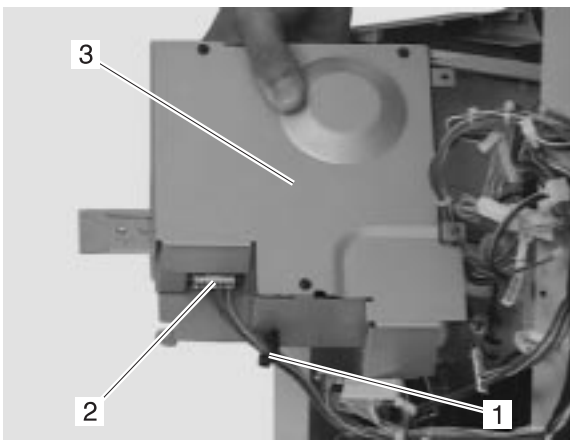
## 4040 Finisher

### Power Supply Removal

1. Remove the finisher driver board.
2. Remove the screw(1), the 3 screws (2), then the power supply assembly (3).

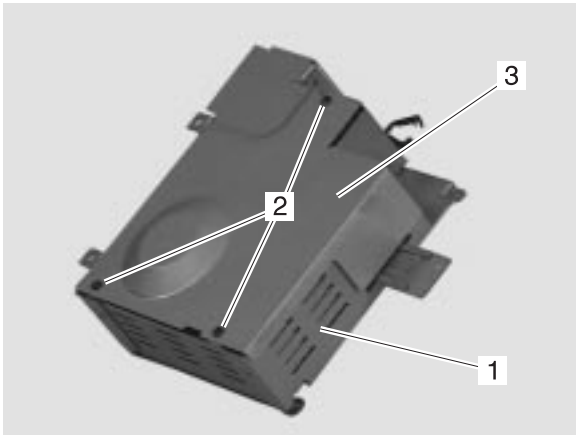


3. Release the cable guide (1) on the power supply (3) and disconnect the connector (2).



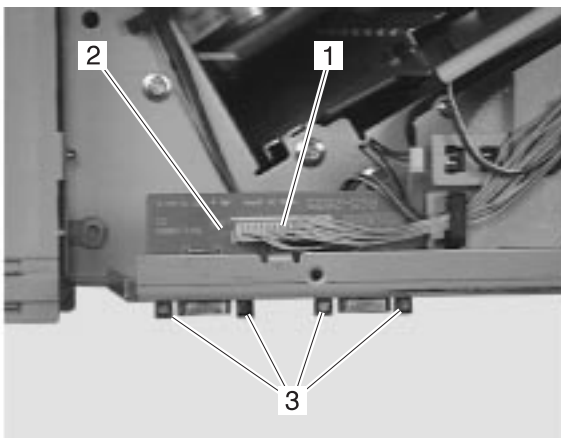
## 4040 Finisher

4. Remove the 3 screws (2) on the power supply (1), then remove the cover (3).



## Interface Board Removal

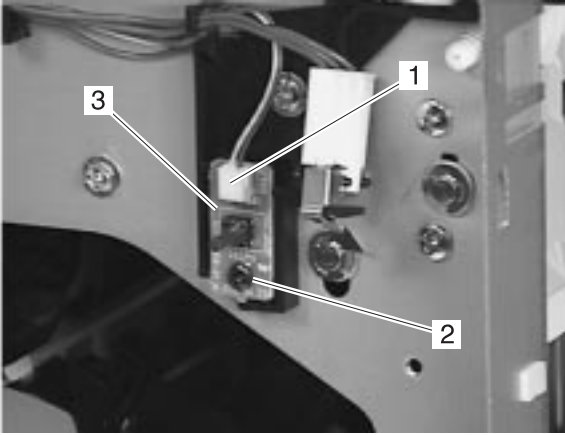
1. Remove the rear cover.
2. Disconnect the connector (1).
3. Remove the 4 screws (3), then the interface board (2).



## 4040 Finisher

### Test Staple Switch Board Removal

1. Remove the front cover.
2. Disconnect the connector (1).
3. Remove the screw (2), then the test staple switch board (3).



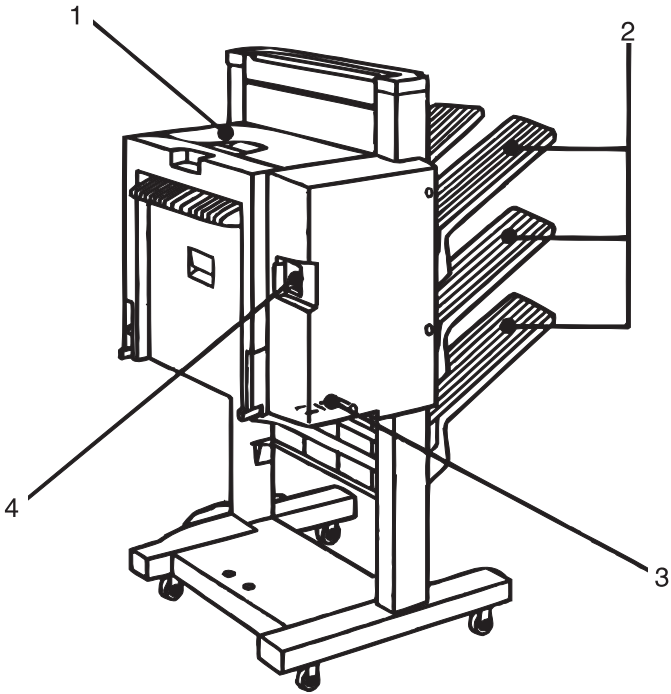
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## 4. Locations

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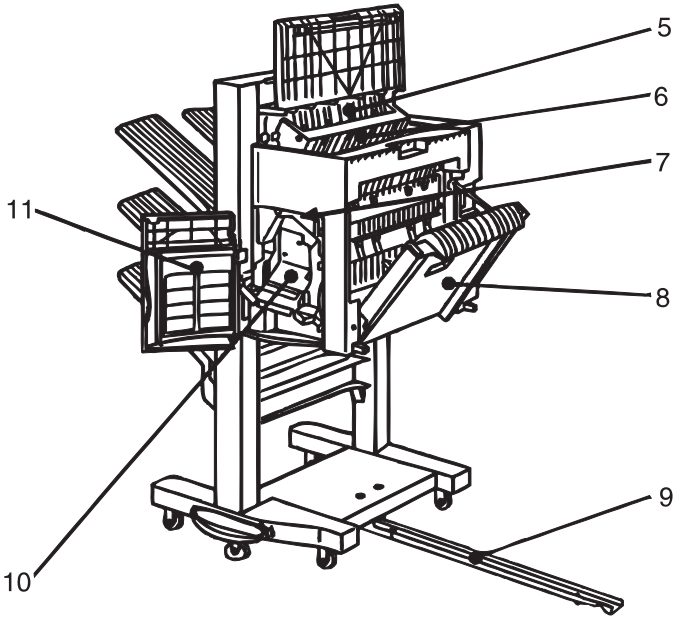
### Parts of the Finisher

1. Top Door
2. Tray Assembly
3. Interface Connector
4. Power Receptacle



## 4040 Finisher

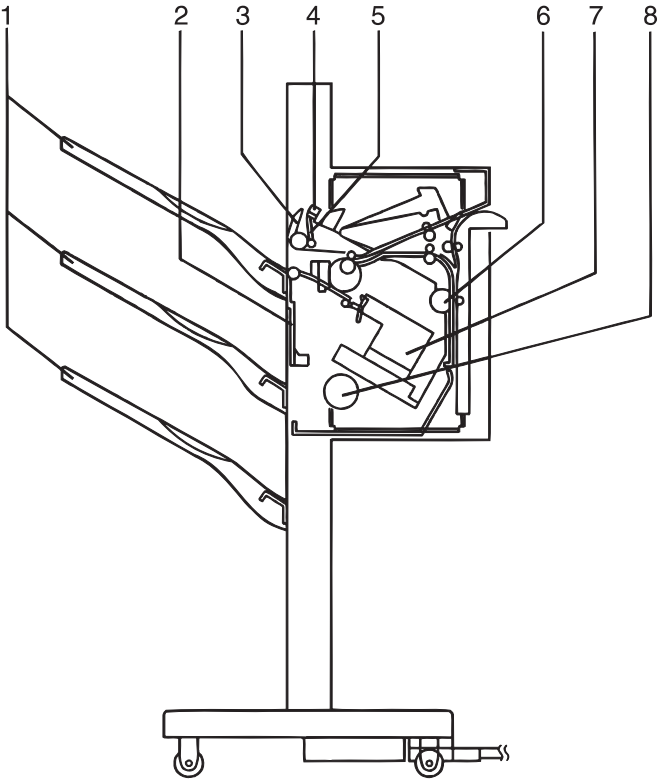
5. Top Guide (labeled 1)
6. Bottom Guide (labeled 2)
7. Staple Test Switch
8. Right Cover
9. Guide Rail
10. Staple Assembly and Serial Number Label
11. Front Door





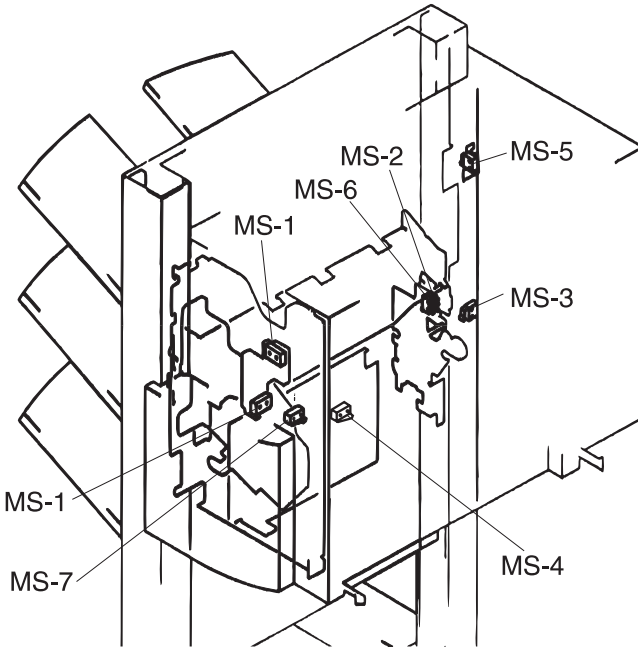
# 4040 Finisher

## Cross Sectional View



1. Tray Assembly
2. Shutter
3. Swing Guide
4. Distance Sensor
5. Paddle
6. Reversing Roller
7. Staple Assembly
8. Tray Assembly Elevation Motor

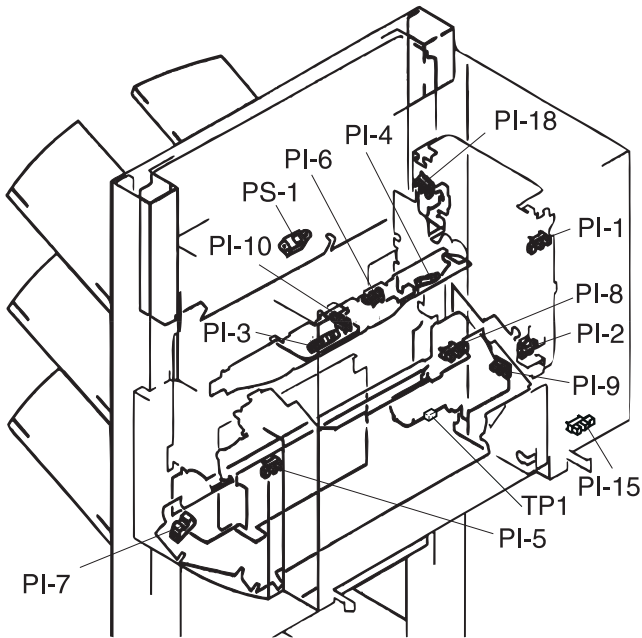
Switches



Name	Function
MS-1	Top Cover Open/Close Detection Switch
MS-2	Swing Guide Close Detecting Switch
MS-3	Safety Range Sensing Switch
MS-4	Shutter Close Sensing Switch
MS-5	Tray Upper Limit Sensing Switch
MS-6	Swing Guide Close Sensing Switch
MS-7	Front Cover Open/Close Sensing Switch

## 4040 Finisher

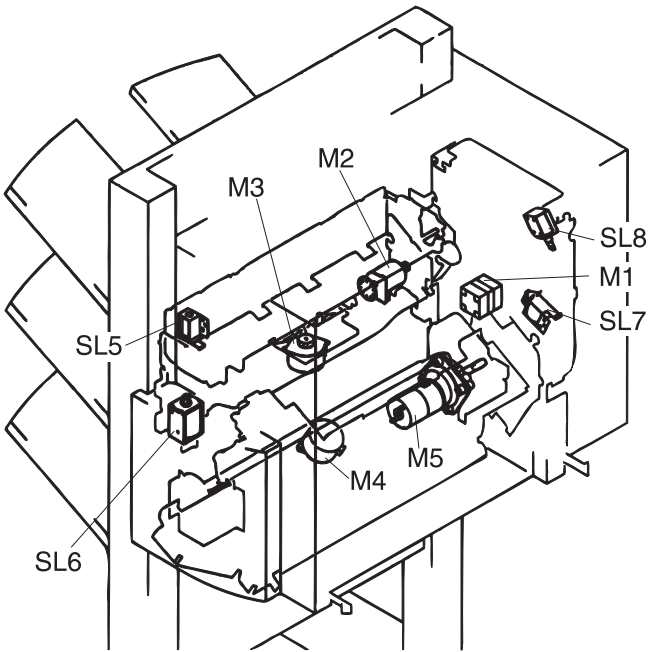
### Sensors



Name	Function
PI-1	Input Paper Sensor
PI-2	Reversing Assembly Paper Sensor
PI-3	Delivery Paper Sensor
PI-4	Staple Tray Paper Sensor
PI-5	Shutter Open Sensor
PI-6	Alignment Plate Home Position Sensor
PI-7	Stapler Home Position Sensor
PI-8	Tray Assembly Home Position Sensor
PI-9	Tray Assembly Elevation Motor Clock Sensor
PI-10	Delivery Motor Clock Sensor
PI-15	Joint Sensor (J117)
PI-18	Swing Guide Open Sensor
PS1	Distance Sensor
TP1	Tray Assembly Elevation Motor Temperature Sensor

# 4040 Finisher

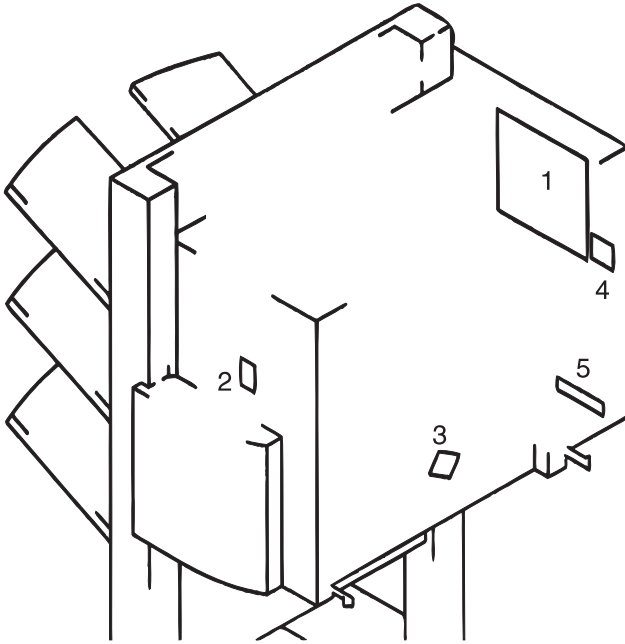
## Solenoids and Motors



Name	Function
SL5	Paddle Drive Solenoid
SL6	Standard Plate Withdrawal Solenoid
SL7	Reversing Roller Drive Solenoid
SL8	Face-up Flapper Solenoid
M1	Paper Feed Motor
M2	Paper Delivery Motor
M3	Alignment Plate Shift Motor
M4	Stapler Shift Motor
M5	Tray Elevation Motor
M6	Stapler Motor

## 4040 Finisher

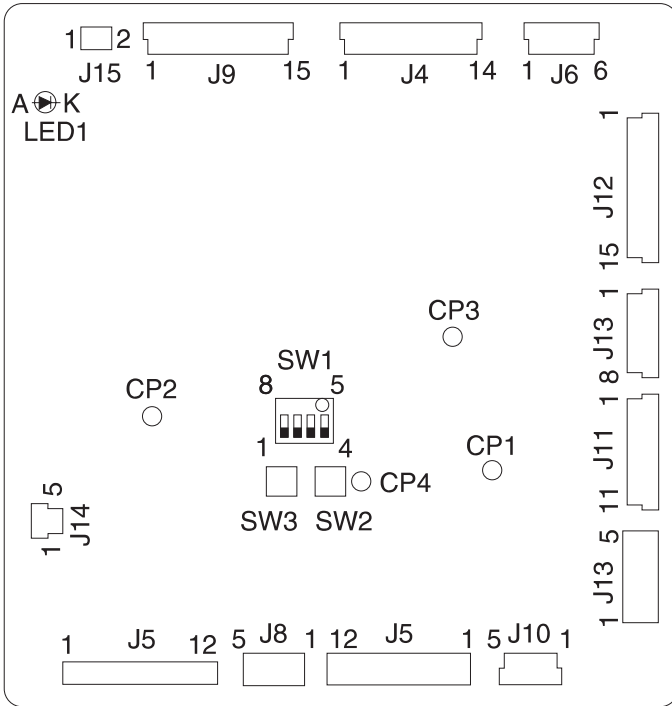
### Printed Circuit Boards



	<b>Name</b>	<b>Function</b>
1	Finisher Driver Board	Controls loads and sensors.
2	Test Staple Switch Board	For test staple switch.
3	Staple Relay Board 2	Relays signals between sensors and the finisher driver board.
4	Staple Relay Board 1	Relays signals between sensors and the finisher driver board.
5	Option Interface Board	Relays signals between the paper deck driver board and the finisher driver board.

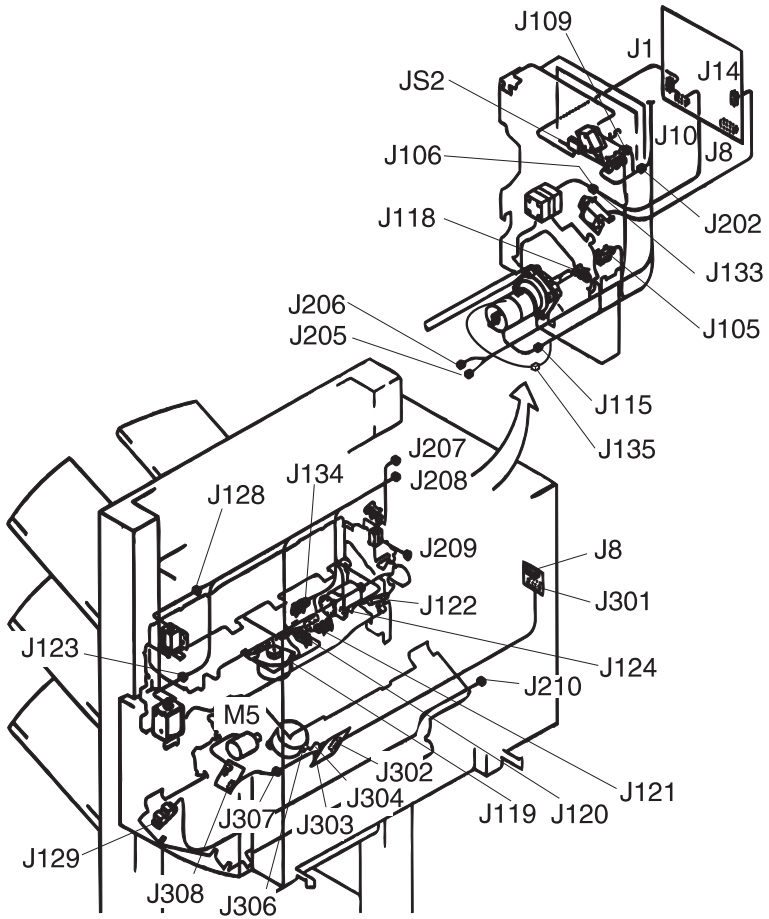
# 4040 Finisher

## Driver Board

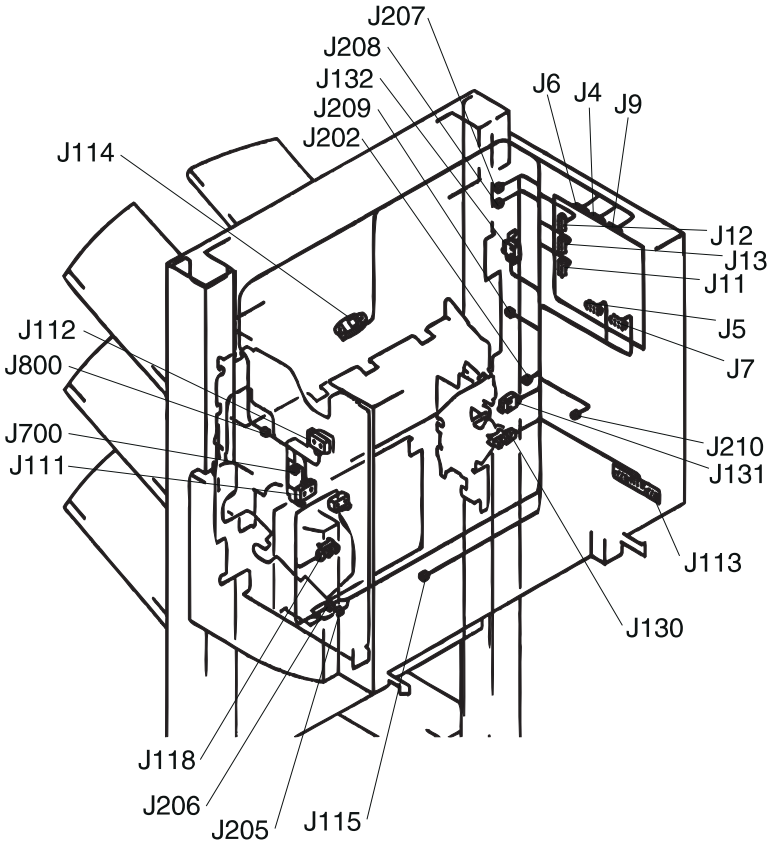


# 4040 Finisher

## Connectors



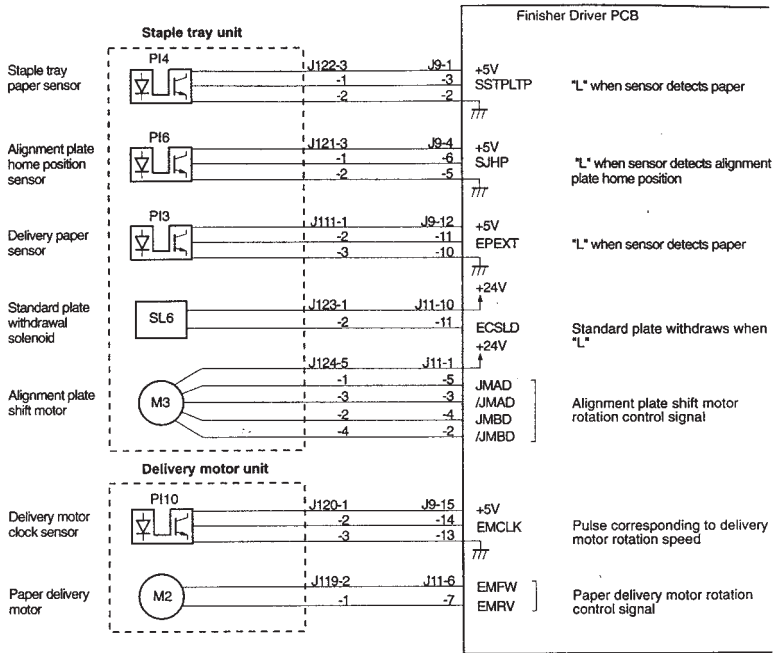
**4040 Finisher**



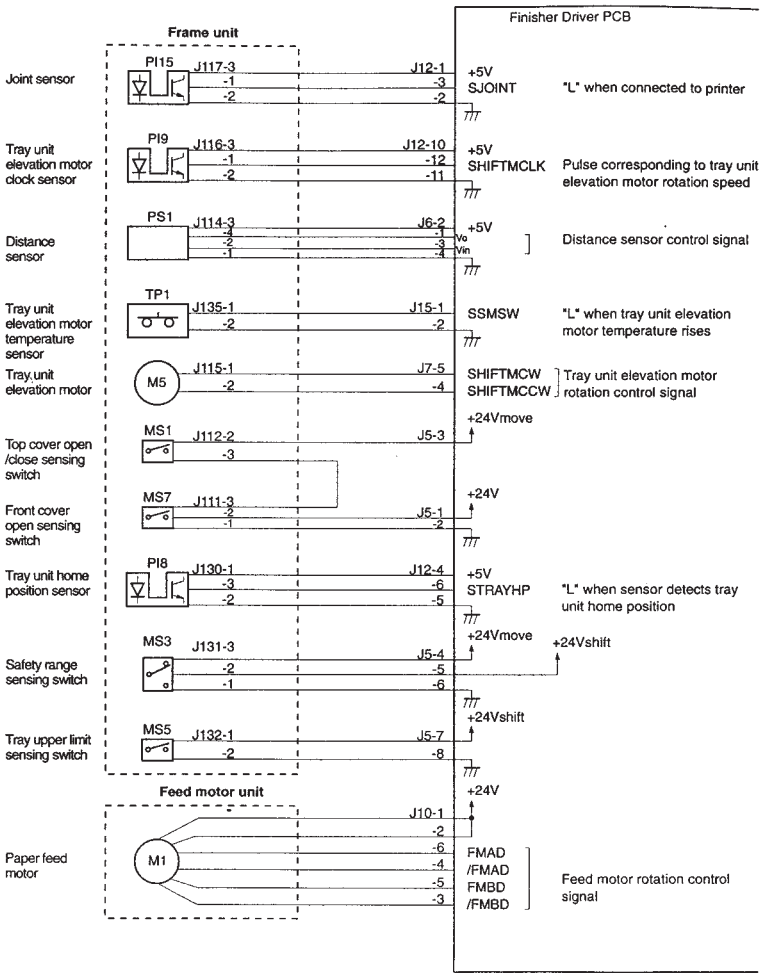


# 4040 Finisher

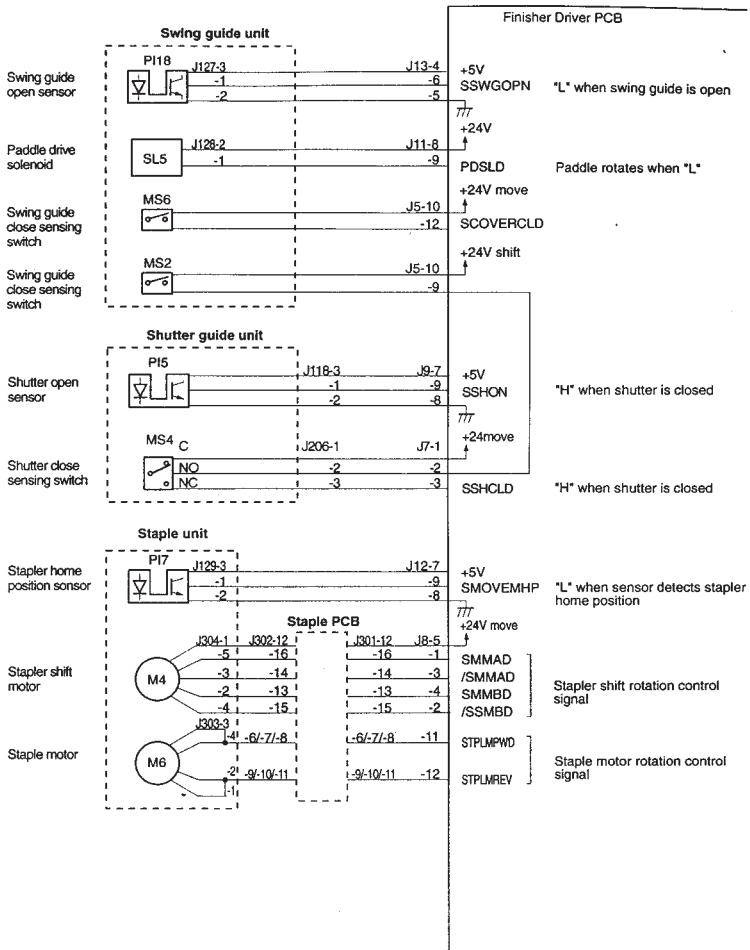
## Finisher Driver Board Inputs and Outputs



# 4040 Finisher



# 4040 Finisher



## 5. Parts Catalog

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### How to Use This Parts Catalog

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- **SIMILAR ASSEMBLIES:** If two assemblies contain a majority of identical parts, they are broken down on the same list. Common parts are shown by one index number. Parts peculiar to one or the other of the assemblies are listed separately and identified by description.
- **AR: (As Required)** in the Units column indicates that the quantity is not the same for all machines.
- **NP: (Non-Procurable)** in the Units column indicates that the part is non-procurable and that the individual parts or the next higher assembly should be ordered.
- **NR: (Not Recommended)** in the Units column indicates that the part is procurable but not recommended for field replacement, and that the next higher assembly should be ordered.
- **R: (Restricted)** in the Units column indicates that the part has a restricted availability.
- **NS: (Not Shown)** in the Asm-Index column indicates that the part is procurable but is not pictured in the illustration.
- **PP: (Parts Packet)** in the Description column indicates that the part is contained in a parts packet.
- A part reference within a circle indicates an assembly or a bill-of-material. An assembly is complete. A bill-of-material contains unassembled parts.
- **INDENTURE:** The indenture is marked by a series of dots located before the parts description. The indenture indicates the relationship of a part to the next higher assembly. For example:

#### INDENTURE RELATIONSHIP OF PARTS

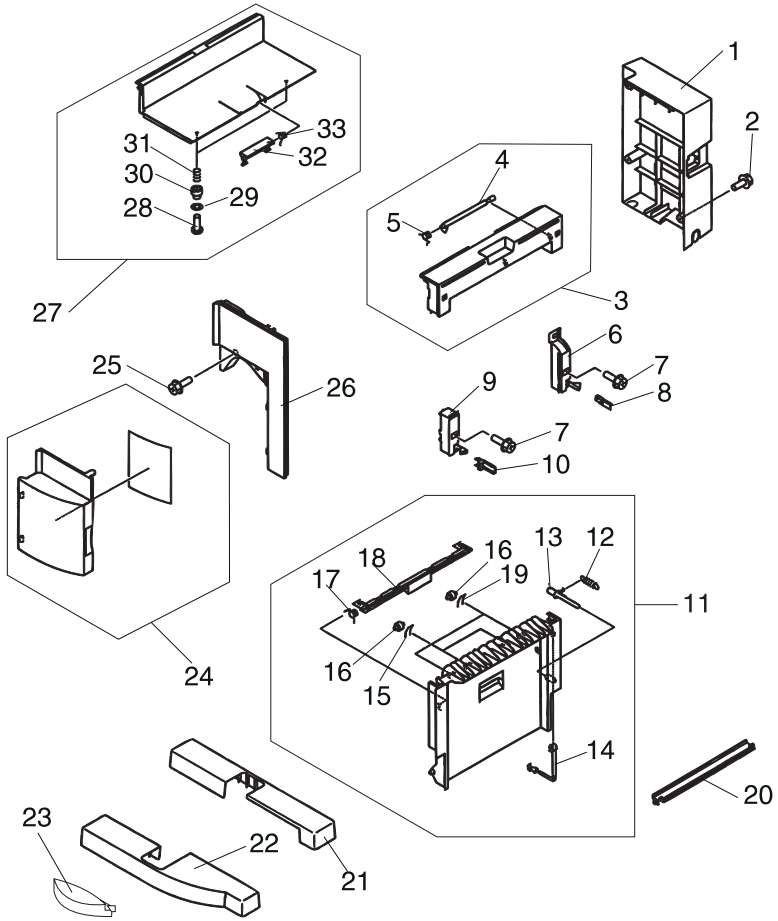
(No dot) MAIN ASSEMBLY

(One dot) ● Detail parts or subassembly of a main assembly

(Two dot) ●● Detail part or subassembly of a one-dot subassembly

# 4040 Finisher

## Assembly 1: External Covers

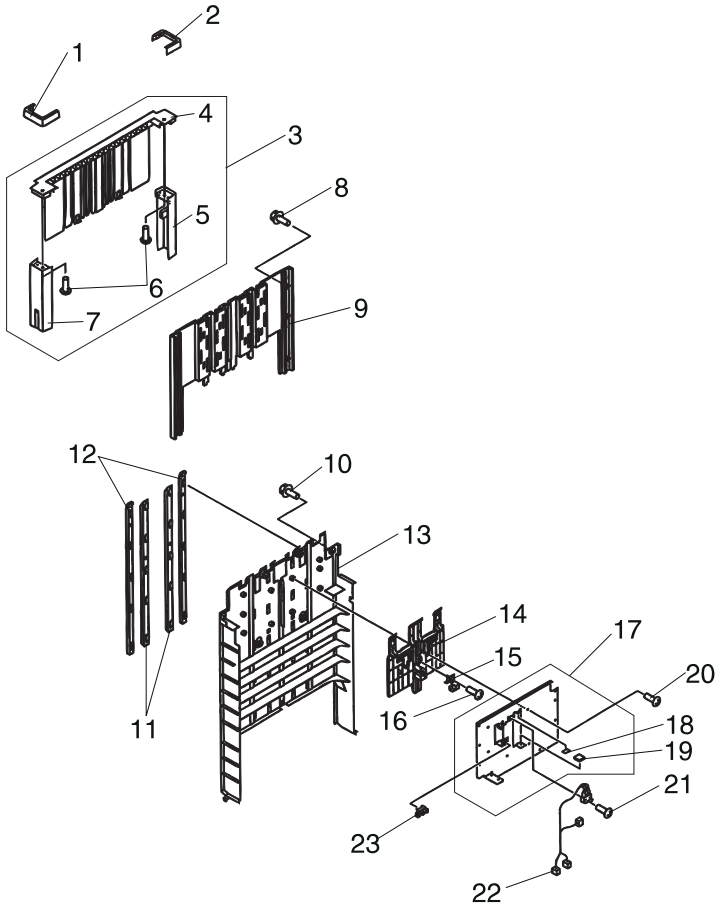


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0017	1	Cover, Rear
2		3	Screw, PP 11D0300
3	11D0013	1	Top Cover Assembly
4	11D0015	1	• Flag, Sensor
5		1	• Spring, Torsion, PP 11D0302
6	11D0023	1	Latch, Rear
7		1	Screw, PP 11D0300
8	11D0024	1	Stop, Latch, Rear
9	11D0021	1	Latch, Front
10	11D0022	1	Stop, Latch, Front
11	11D0025	1	Right Guide Assembly
12		1	• Spring, Torsion, PP 11D0301
13		1	• Flag, Sensor, PP 11D0302
14		1	• Hinge, PP 11D0302
15	11D0032	1	• Spring, Torsion
16	11D0303	1	• Roller A
17		1	• Spring, Torsion, PP 11D0301
18	11D0027	1	• Latch, Right Guide
19	11D0030	1	• Spring, Torsion
20	11D0034	1	Guide, Delivery
21	11D0035	1	Cover, Lower, Rear
22	11D0036	1	Cover, Lower, Front
23	11D0306	1	Cover, Caster
24	11D0020	1	Cover, Door
25		3	Screw, PP 11D0300
26	11D0019	1	Cover, Front
27	11D0005	1	Top Door Assembly
28		1	• Screw, PP 11D0300
29		2	• Washer, PP 11D0302
30	11D0011	1	• Spacer, Pressure
31		1	• Spring, Torsion, PP 11D0302
32	11D0010	1	• Latch
33		1	• Spring, Torsion, PP 11D0301

# 4040 Finisher

## Assembly 2: External Covers (Cont)



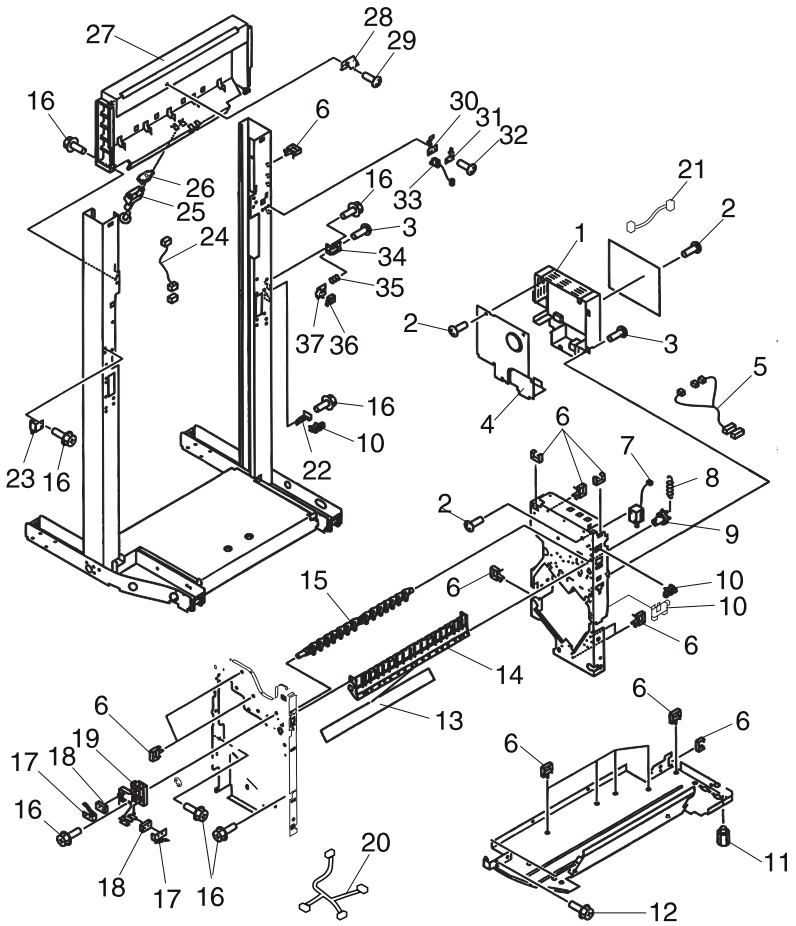
## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0038	1	Cap, Cover, Front
2	11D0037	1	Cap, Cover, Rear
3	11D0039	1	Slide, Guide Assembly
4	11D0040	1	• Guide, Slide
5	11D0042	1	• Cover, Slide, Rear
6		2	• Screw, PP11D0300
7	11D0041	1	Cover, Slide, Front
8		6	Screw, PP 11D0300
9	11D0044	1	Guide, Hurdle, Top
10		6	Screw, PP11D0300
11	11D0047	2	Plate, Hurdle 1
12	11D0046	1	Plate, Hurdle 2
13	11D0048	1	Guide, Hurdle, Lower
14	11D0050	1	Shutter, Hurdle
15	11D0051	1	Spring, Leaf
16		1	Screw, PP 11D0300
17	11D0053	1	Plate, Shutter
18	11D0054	1	Damper, Shutter
19	11D0055	1	Damper
20		11	Screw, PP 11D0300
21		1	Screw, PP 11D0300
22	11D0057	1	Cable Shutter, MS4
23	11D0071	1	Photo Interrupter, PI-5, Shutter Open/Close Detection Sensor



# 4040 Finisher

## Assembly 3: Stapler, Main Body

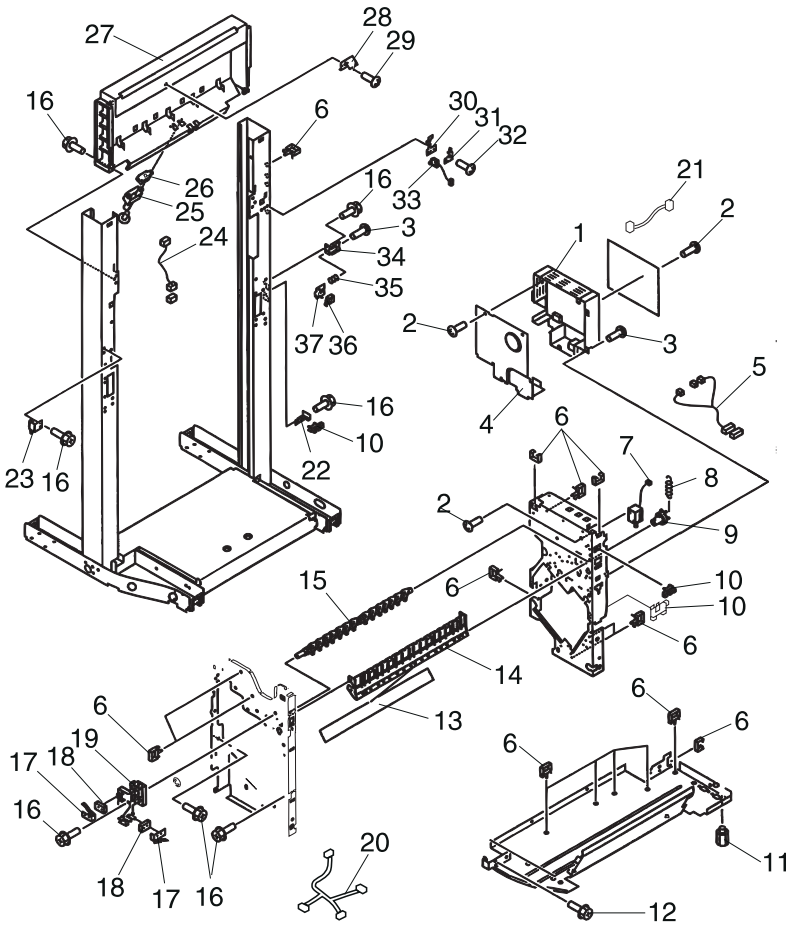


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0076	1	Power Supply
2		4	Screw, PP 11D0300
3		2	Screw, PP 11D0300
4	11D0079	1	Cover, Power Supply
5	11D0080	1	Cable, Sensor
6		1	Clamp, Cord, PP 11D0302
7	11D0084	1	Solenoid, SL8
8		1	Spring, Tension, PP 11D0301
9	11D0086	1	Arm, Deflector
10	11D0071	1	Photo Interrupter, PI-1, PI-8, PI-15
11		4	Thumb Screws, PP 11D0300
12		1	Screw, PP 11D0300
13	11D0089	1	Paper Detector Strip
14	11D0090	1	Guide, Paper Feed
15	11D0092	1	Deflector
16		1	Screw, PP 11D0300
17	11D0094	1	Spring, Leaf
18	11D0095	1	Microswitch, MS1, MS7
19	11D0096	1	Cover, Switch
20	11D0307	1	Cable, Switch
21	11D0308	1	Cable, Power Supply
22	11D0070	1	Mount, Sensor
23	11D0075	1	Hinge, Door
24	11D0072	1	Cable, Sensor
25	11D0073	1	Duct, Sensor
26	11D0074	1	Sensor, Paper Height, PS1, Distance Detecting Sensor
27	11D0059	1	Mount, Slide
28	11D0060	1	Spring, Leaf
29		1	Screw, PP 11D0300
30	11D0062	1	Spring, Leaf
31	11D0063	1	Holder, Sensor
32		1	Screw, PP 11D0300
33	11D0064	1	Microswitch, MS5, Tray Upper Limit Detection Switch
34	11D0066	1	Bracket
35	11D0067	1	Spring, Compression

# 4040 Finisher

## Assembly 3: Stapler, Main Body (Cont)

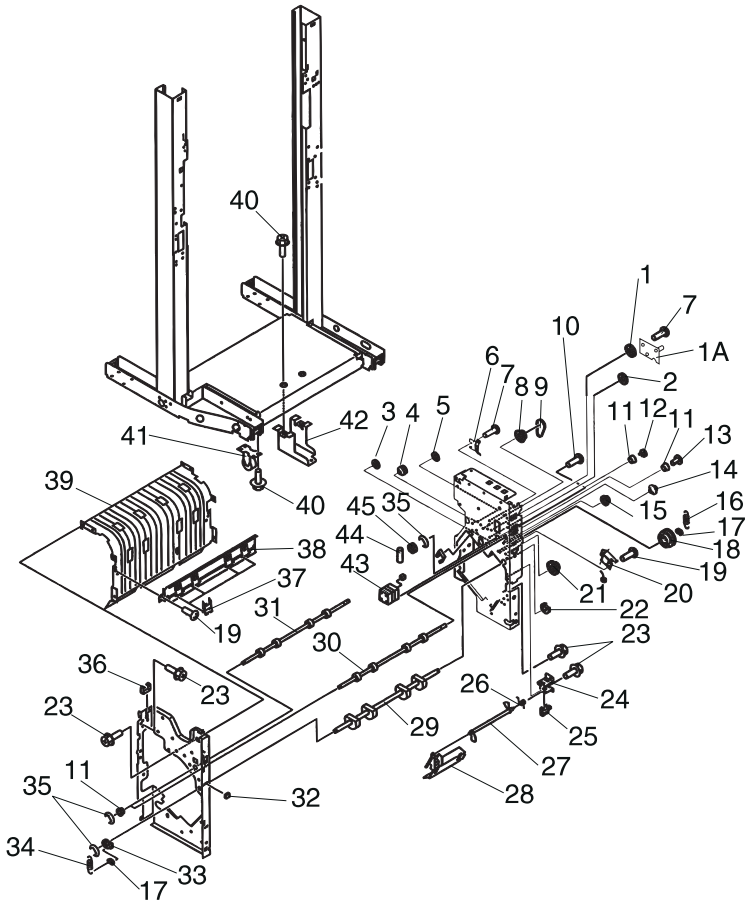


## 4040 Finisher

<b>Ref</b>	<b>Part Number</b>	<b>Units</b>	<b>Description</b>
36	11D0068	1	Microswitch Rail, Tray Lift, MS3
37	11D0069	1	Holder
NS	11D0343	1	Fuse, Power Supply

# 4040 Finisher

## Assembly 4: Stapler, Main Body

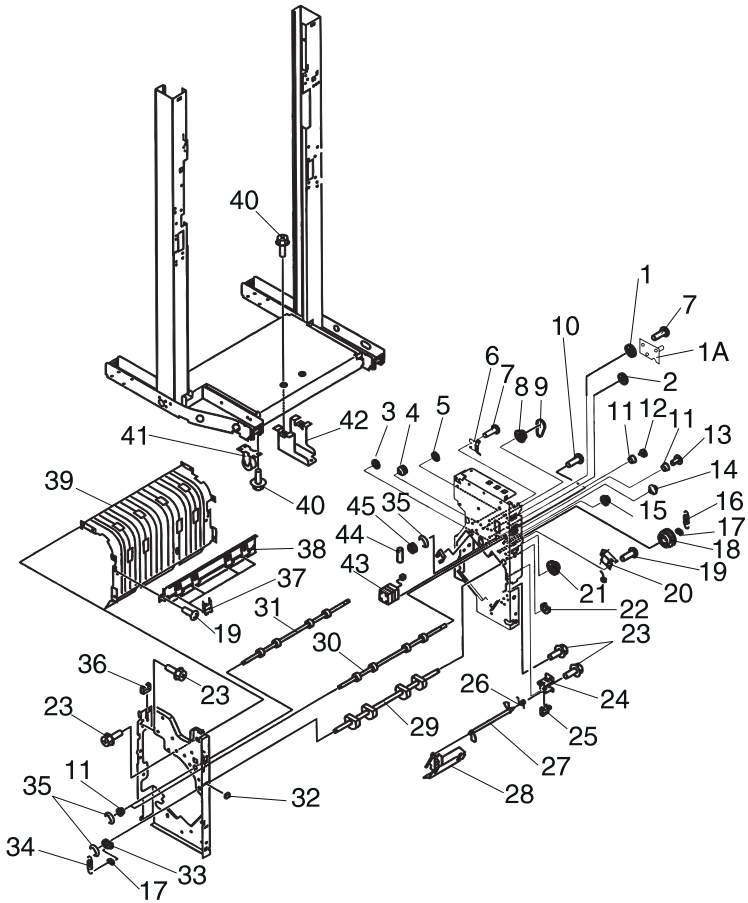


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0311	1	Gear, 20T/42T
1A	11D0309	1	Plate, Shaft
2	11D0103	1	Gear, 20T/36T
3	11D0108	1	Gear, 26T
4	11D0107	1	Gear, 18T/24T
5	11D0109	1	Gear, 28T
6	11D0310	1	Plate, Grounding
7		4	Screws, PP 11D0300
8	11D0100	1	Gear, 27T/Pulley, 48T
9	11D0099	1	Belt, Timing
10		1	Screw, PP 11D0300
11	11D0166	2	Bushing
12	11D0313	1	Gear 18T
13	11D0312	1	Gear, 22T/42T
14	11D0104	1	Gear, 15T/27T
15	11D0105	1	Gear, 16T/24T
16		1	Spring, Tension, PP 11D0301
17		1	Collar, Spring, PP 11D0302
18	11D0110	1	Gear, 45T/55T
19		1	Screw, PP 11D0302
20	11D0114	1	Solenoid, Reversing, SL7
21	11D0106	1	Gear, 17T/46T
22	11D0113	1	Gear, 30T
23		2	Screw, PP 11D0300
24	11D0119	1	Mount, Sensor
25	11D0071	1	Photo Interrupter, PI-2
26		1	Spring, Torsion, PP 11D0301
27	11D0121	1	Flag, Sensor
28	11D0122	1	Guide, Cable
29	11D0123	1	Shaft, Roller, Reversing
30	11D0124	1	Shaft, Roller, Paper Feed 1
31	11D0125	1	Shaft, Roller, Paper Feed 2
32	11D0133	1	Hook, Reversing Roller
33	11D0130	1	Arm, Reverse
34		1	Spring, PP 11D0301
35		1	C-Clip, PP 11D0302
36		1	Clamp, PP 11D0302

# 4040 Finisher

## Assembly 4: Stapler, Main Body (Cont)



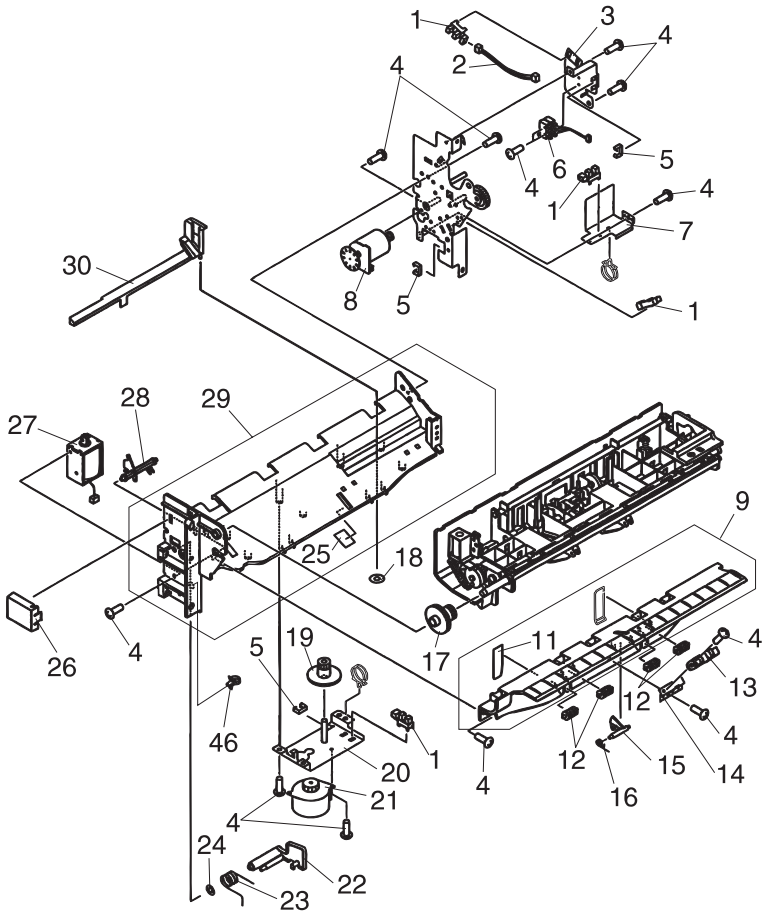
## 4040 Finisher

Ref	Part Number	Units	Description
37	11D0127	1	Cover, Spring
38	11D0126	1	Guide, Reverse
39	11D0128	1	Guide, Center
40		2	Screw, PP 11D0300
41	11D0134	1	Caster
42	11D0135	1	Mount, Rail
43	11D0118	1	Motor, Paper Feed, M1
44		1	Pin, Parallel, PP 11D0302
45	11D0117	1	Gear, 20T



# 4040 Finisher

## Assembly 5: Stapler Tray, Main Body

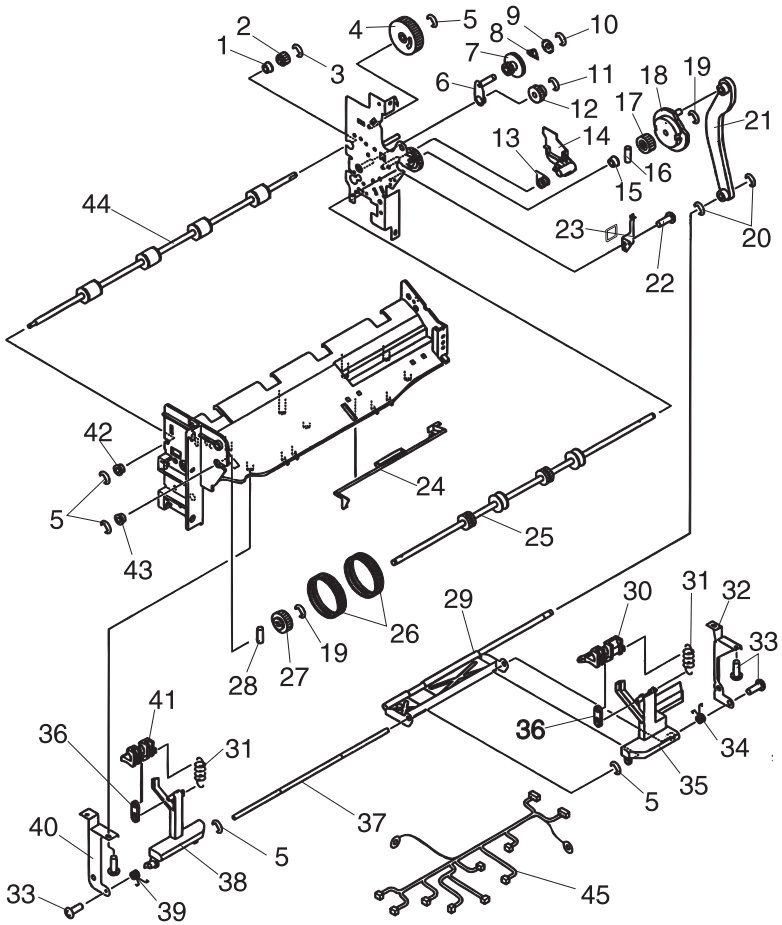


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0071	1	Photo Interrupter, PI-4, PI-6, PI-10, PI-18
2	11D0136	1	Cable, Sensor
3	11D0137	1	Plate, Swing
4		6	Screws, PP 11D0300
5		1	Clamp, Cord, PP 11D0302
6	11D0139	1	Cable with Sensor, MS2, MS6
7	11D0141	1	Mount, Sensor
8	11D0142	1	Motor, Paper Delivery Motor, M3
9	11D0143	1	Guide, Staple
11	11D0145	1	Paper Guide Strip
12	11D0146	1	Roller, Staple Tray
13	11D0151	1	Photo Interrupter, PI-3
14	11D0150	1	Mount, Sensor
15	11D0148	1	Flag, Sensor
16		1	Spring, Torsion, PP 11D0301
17	11D0299	1	Gear, 15T/32T
18		1	Washer, PP 11D0302
19	11D0165	1	Gear, 12T/36T
20	11D0163	1	Mount, Motor
21	11D0162	1	Motor, Alignment Plarte Shift, M2
22	11D0161	1	Shutter
23	11D0160	1	Spring, Torsion
24	11D0159	1	Shim
25	11D0155	1	Seal
26	11D0158	1	Cover, Cable
27	11D0157	1	Solenoid, Standard Plate Withdraw, SL6
28	11D0156	1	Lever, Shutter
29	11D0154	1	Tray, Stapler
30	11D0153	1	Plate, Paper Adjusting

# 4040 Finisher

## Assembly 6: Stapler Tray, Main Body (Cont)

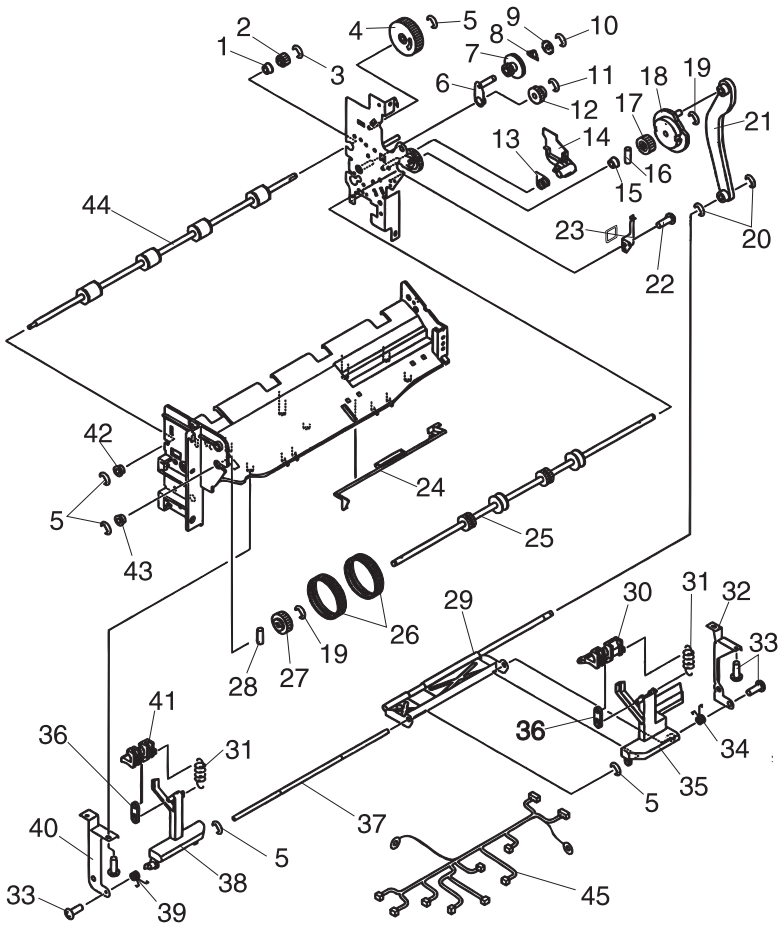


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0166	1	Bearing, Brass
2	11D0167	1	Gear, 15T
3		2	C-Clip, PP 11D0302
4	11D0169	1	Gear, 50T
5		1	C-Clip, PP 11D0302
6	11D0171	1	Lever, Swing
7	11D0172	1	Gear, 15T/34T
8	11D0173	1	Spring, Leaf
9	11D0174	1	Washer
10		1	C-Clip, PP 11D0302
11		1	C-Clip, PP 11D0302
12	11D0177	1	Gear, 15T/23T
13	11D0178	1	Spring, Torsion
14	11D0179	1	Plate, Gear
15	11D0166	1	Bushing
16		1	Pin, Parallel, PP 11D0302
17	11D0180	1	Gear, 18T
18	11D0181	1	Cam, Shutter
19		1	C-Clip, PP 11D0302
20		2	C-Clip, PP 11D0302
21	11D0184	1	Link, Shutter B
22		1	Screw, PP 11D0300
23	11D0186	1	Spring, Leaf
24	11D0187	1	Lever, Sensor
25	11D0188	1	Roller 1, Delivery
26	11D0189	1	Belt, Delivery
27	11D0320	1	Gear, 22T
28		1	Pin, Parallel, PP 11D0302
29	11D0201	1	Link, Shutter A
30	11D0202	1	Stop, Rear
31		2	Spring, Tension, PP 11D0301
32	11D0321	1	Plate, Support, Rear
33		4	Screw, PP 11D0300
34	11D0205	1	Spring, Torsion
35	11D0198	1	Lever, Stop, Rear
36	11D0200	1	Link
37	11D0203	1	Crossbar, Stop

# 4040 Finisher

## Assembly 6: Stapler Tray, Main Body (Cont)

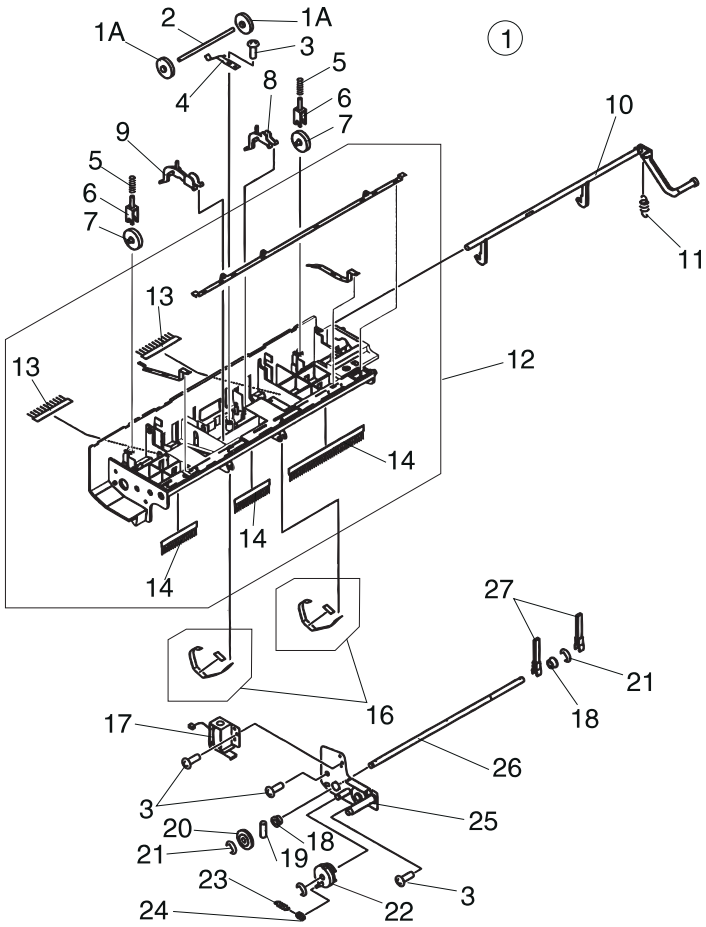


## 4040 Finisher

Ref	Part Number	Units	Description
38	11D0204	1	Lever, Stop, Front
39	11D0205	1	Spring, Torsion
40	11D0206	1	Plate, Support, Front
41	11D0207	1	Stop, Front
42	11D0193	1	Bearing
43	11D0191	1	Bearing
44	11D0194	1	Shaft, Delivery Roller 2
45	11D0318	1	Cable, Swing Guide
NS	11D0319	1	Cable Clip, Swing Guide Cable

# 4040 Finisher

## Assembly 7: Swing Guide Assembly



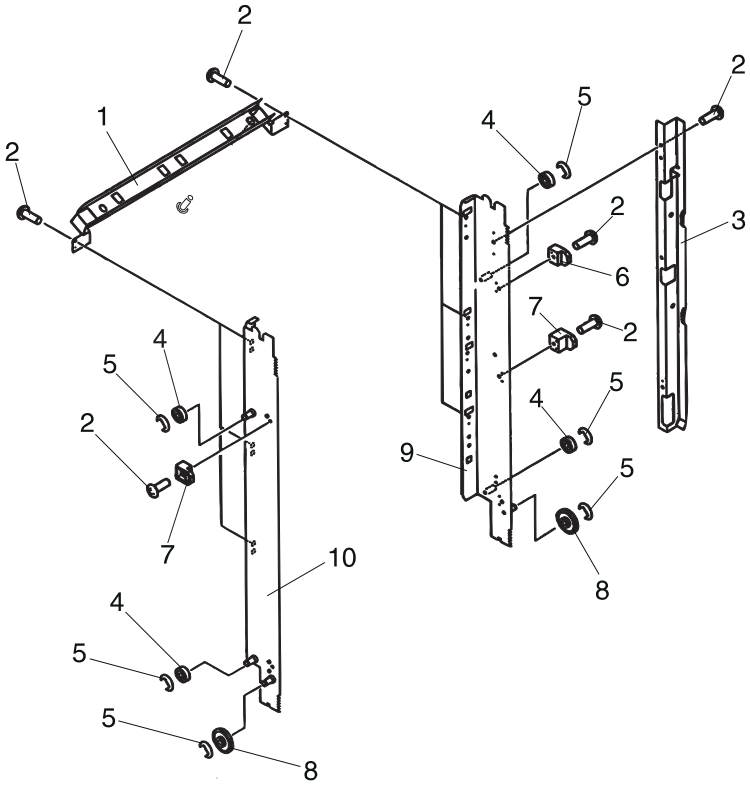
## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0304	1	Swing Guide Assembly
1A	11D0208	1	Roller, Center Swing Guide
2	11D0209	1	Shaft, Roller, Center Swing Guide
3		3	Screw, PP 11D0301
4	11D0212	1	Spring, Retainer
5		2	Spring, PP 11D0302
6	11D0215	1	Holder, Roller
7	11D0216	1	Roller, Outside Swing Guide
8	11D0211	1	Arm, Stop, Rear
9	11D0213	1	Arm, Stop, Front
10	11D0217	1	Lever, Swing
11		1	Spring, Tension, PP 11D0301
12	11D0219	1	Guide, Swing
13	11D0220	1	Static Eliminator
14	11D0221	2	Static Eliminator
15	11D0222	1	Static Eliminator
16	11D0223	1	Plate, Paper Pressure
17	11D0114	1	Solenoid, Paddle Drive, SL5
18	11D0166	1	Bushing
19		1	Pin, Parallel, PP 11D0302
20	11D0224	1	Gear, 21T
21		3	C-Clip, PP 11D0302
22	11D0225	1	Gear, 21T
23		1	Spring, Torsion, PP 11D0301
24		1	Collar, Spring, PP 11D0302
25	11D0226	1	Plate, Drive
26	11D0227	1	Shaft, Swing Guide
27	11D0228	1	Shaft, Reversing



# 4040 Finisher

## Assembly 8: Stapler Tray

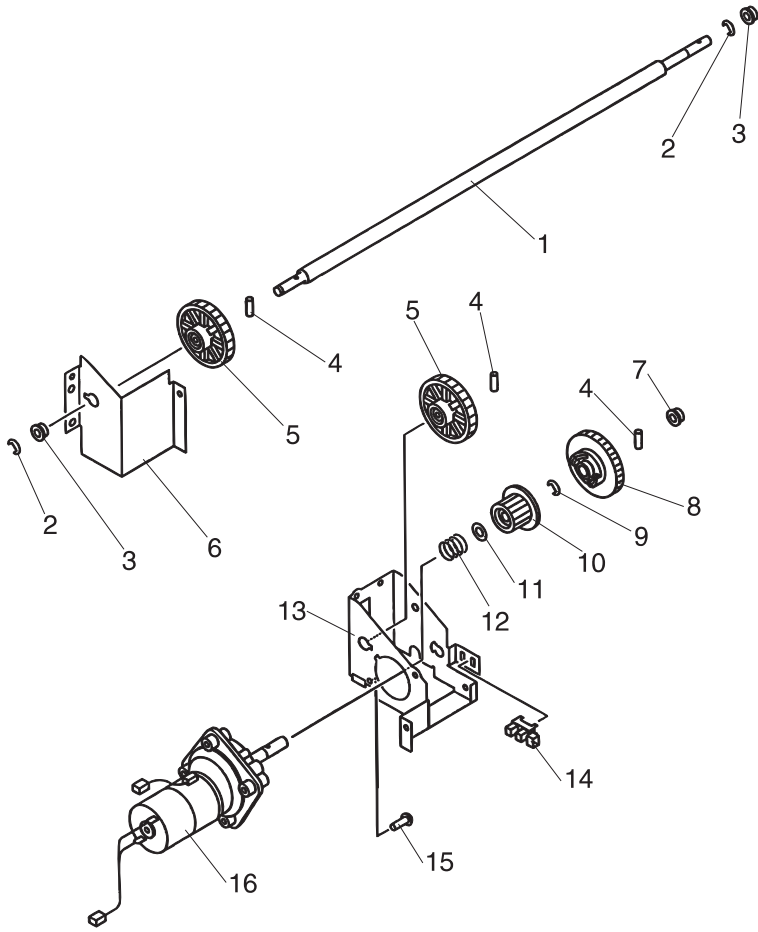


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0232	1	Rail, Tray
2		3	Screw, PP 11D0300
3	11D0238	1	Plate, Guide
4	11D0233	1	Roller, Stapler Tray Frame
5		4	C-Clip, PP 11D0302
6	11D0234	1	Guide, Slide, Top
7	11D0235	1	Guide, Slide, Bottom
8	11D0240	1	Roller, Bottom, Stapler Tray Frame
9	11D0237	1	Frame, Tray, Rear
10	11D0236	1	Frame, Tray, Front

# 4040 Finisher

## Assembly 9: Tray Drive

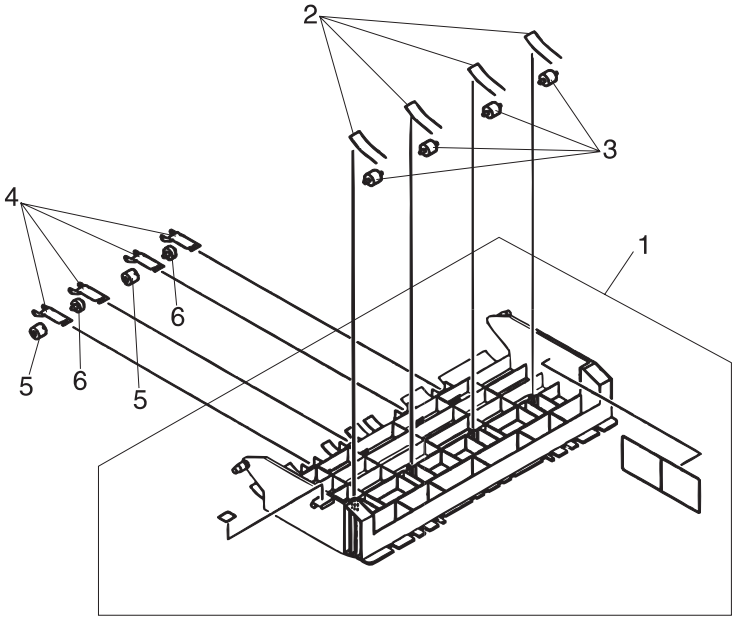


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0241	1	Shaft, Tray
2		2	C-Clip, PP 11D0302
3	11D0166	1	Bushing
4		1	Pin, PP 11D0302
5	11D0245	1	Gear, 48T
6	11D0243	1	Bracket, Drive, Small
7	11D0246	1	Bushing
8	11D0247	1	Cam
9		1	C-Clip, PP 11D0302
10	11D0249	1	Gear, 22T
11		1	Washer, PP 11D0302
12	11D0251	1	Spring, Compression
13	11D0252	1	Bracket, Drive
14	11D0071	1	Photo Interrupter, PI-9
15		2	Screw, PP 11D0300
16	11D0254	1	Motor, Tray Elevator, M5

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## Assembly 10: Upper Feeder

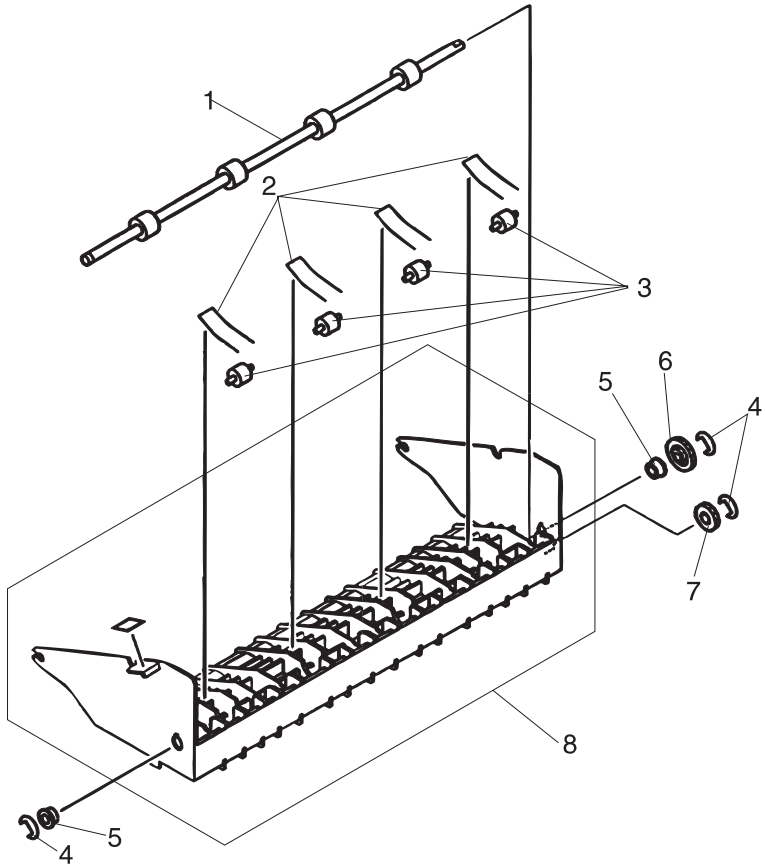


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0255	1	Guide, Upper (labeled 1)
2	11D0259	1	Spring, Torsion
3	11D0303	4	Roller A
4	11D0257	1	Spring, Roller Holder
5	11D0256	1	Roller B
6	11D0258	1	Roller C

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## Assembly 11: Center Guide



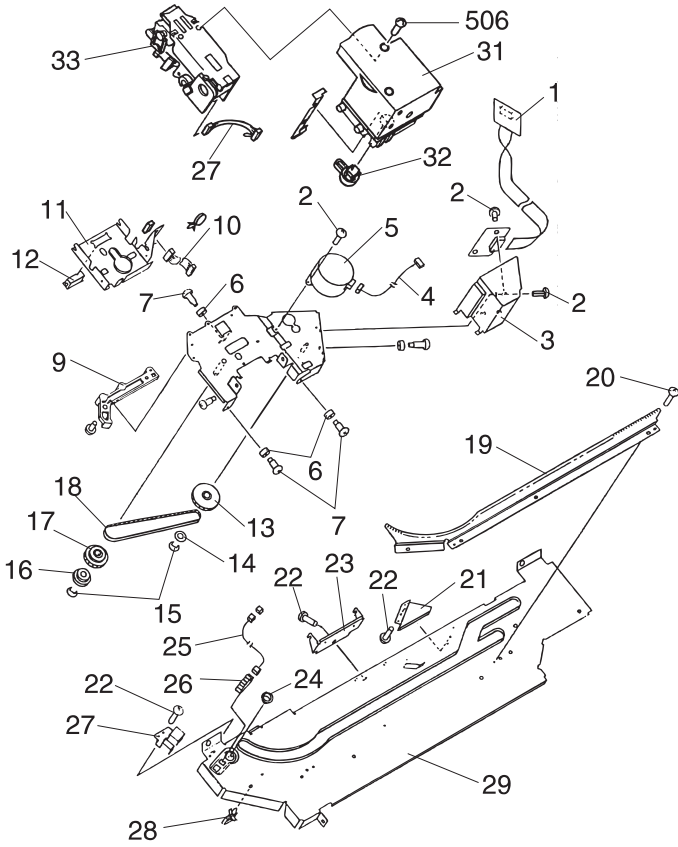
## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0260	1	Shaft, Stapler Roller
2	11D0259	4	Spring, Torsion
3	11D0303	4	Roller, A
4		2	C-Clip, PP 11D0302
5	11D0191	1	Bushing
6	11D0261	1	Gear, 20T
7	11D0262	1	Gear, 16T
8	11D0263	1	Guide, Center (labeled 2)



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## Assembly 12: Stapler

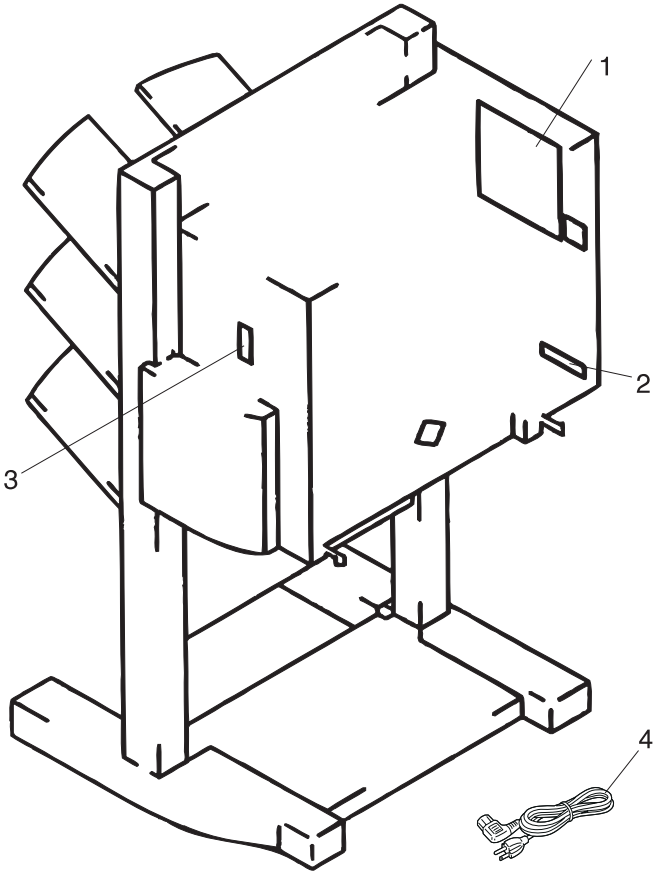


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0264	1	Cable, Flat
2		3	Screw, PP 11D0300
3	11D0267	1	Cover
4	11D0268	1	Cable, Stapler
5	11D0269	1	Motor, Stapler Shift, M4
6	11D0270	1	Roller
7	11D0271	1	Screw, Stepped
9	11D0273	1	Cam, Stop
10	11D0274	1	Cable, Stapler
11	11D0275	1	Mount, Stapler
12	11D0276	1	Catch, Magnet
13	11D0277	1	Gear, 44T/Pulley, 16T
14	11D0278	1	Flange, Pulley
15		1	C-Clip, PP 11D0302
16	11D0281	1	Roller
17	11D0282	1	Gear, 16T/Pulley, 40T
18	11D0283	1	Belt, Timing
19	11D0284	1	Plate, Rack
20		5	Screw, PP 11D0302
21	11D0286	1	Plate, Guide
22		1	Screw, PP 11D0300
23	11D0287	1	Bracket, Staple
24	11D0288	1	Grommet, Cord
25	11D0289	1	Cable, Stapler
26	11D0071	1	Photo Interrupter, PI-7
27	11D0290	1	Cover, Sensor
28		1	Cable Tie, PP 11D0302
29	11D0293	1	Guide, Stapler
30	11D0347	1	Cable, Stapler
31	11D0345	1	Cover, Stapler
32	11D0346	1	Lever, Lock
33	11D0344	1	Stapler Assembly
34		2	Screws, PP 11D0300

# 4040 Finisher

## Assembly 13: Electronic Boards and Power Cords

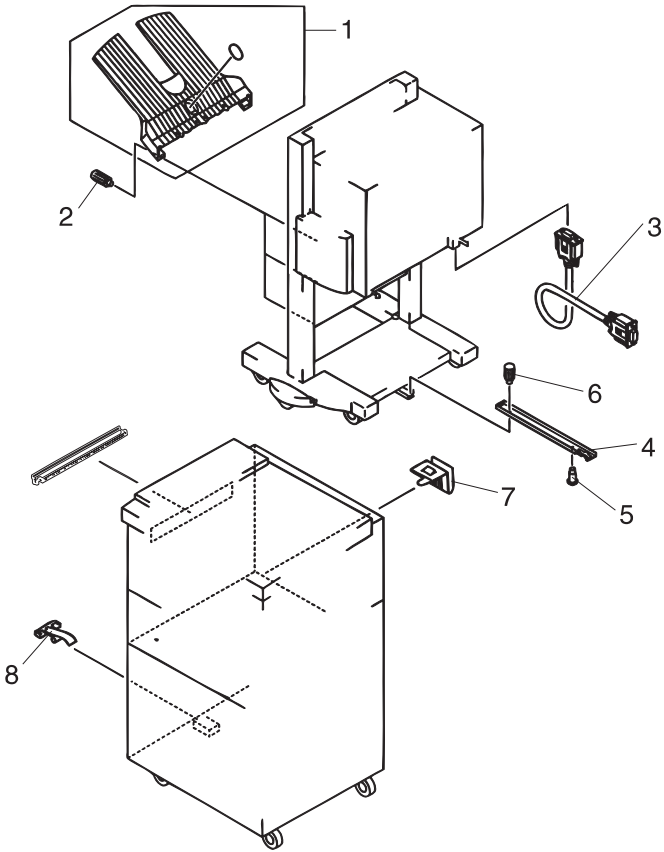


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0294	1	Finisher Driver Board
2	11D0296	1	Interface Board
3	11D0298	1	Switch Board, Stapler
4	11D0328	1	Power Cord, U.S, Canada, APG (LV), LAD (LV)
4	11D0333	1	Power Cord, Denmark
4	11D0334	1	Power Cord, Europe, England
4	11D0334	1	Power Cord, France
4	11D0334	1	Power Cord, Germany
4	11D0335	1	Power Cord, Italy
4	11D0334	1	Power Cord, Spain
4	11D0336	1	Power Cord, Swiss/French
4	11D0336	1	Power Cord, Swiss/German
4	11D0336	1	Power Cord, Swiss/Italian
4	11D0337	1	Power Cord, U.K.
4	11D0338	1	Power Cord, Israel
4	11D0339	1	Power Cord, South Africa
4	11D0334	1	Power Cord, Belgium
4	11D0330	1	Power Cord, Argentina
4	11D0331	1	Power Cord, Brazil
4	11D0332	1	Power Cord, Chile
4	11D0329	1	Power Cord, Peru
NS	11D0326	1	Finisher Option Control Board (To be used when the finisher is installed)

# 4040 Finisher

## Assembly 14: Attachment Parts

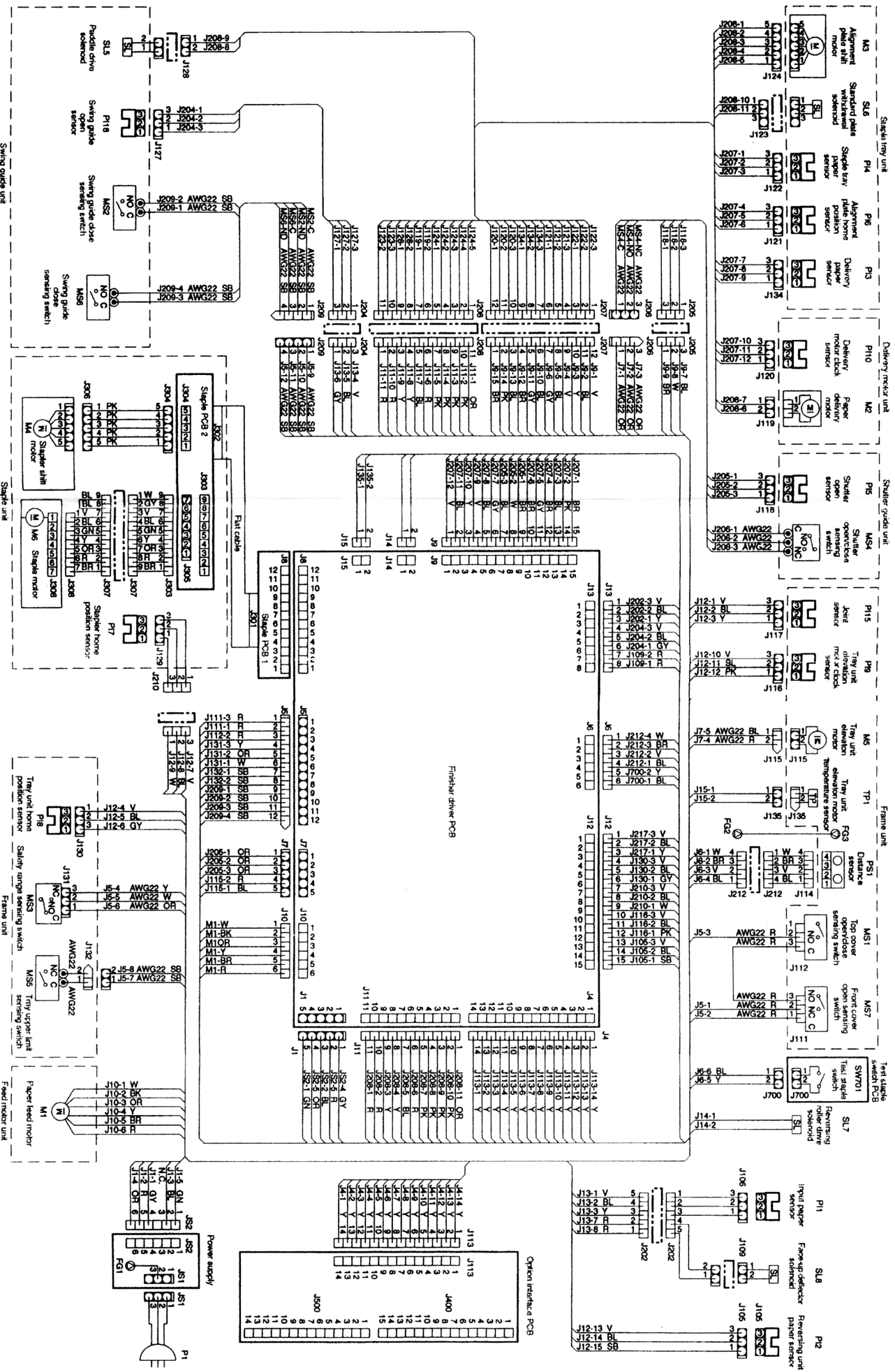


## 4040 Finisher

Ref	Part Number	Units	Description
1	11D0229	3	Tray, Face-up
2	11D0231	2	Screw, Tray
3	11D0305	1	Cable, Interface
4	11D0322	1	Rail
5	11D0325	1	Screw, Stepped
6	11D0327	2	Screw
7	11D0323	1	Holder, Interface Cable
8	11D0324	1	Ground Adapter

# 4040 Finisher Option Wiring Diagram

## Optra N (4040) Finisher Service Manual (1/1/96)



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