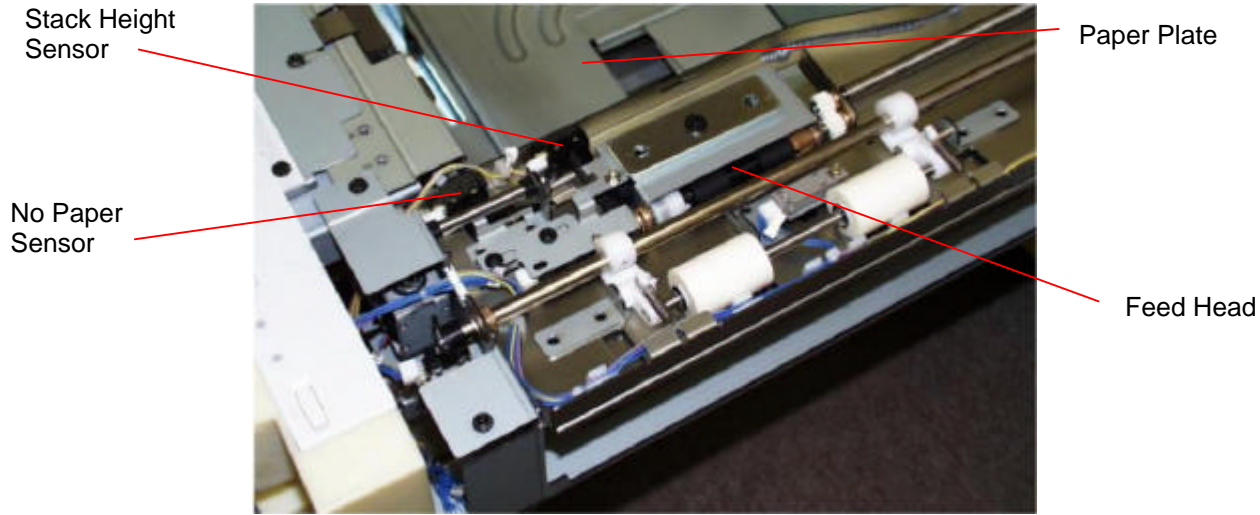


## Paper Tray 3 - Paper Handling Module

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### Tray 3 Operational Overview

Tray 3 is the largest of the three Sfida paper trays and holds up to 2000 sheets of 20lb / 80gsm paper. An Elevator Motor drives a cable and pulley arrangement to raise and lower the paper supply tray for feeding and loading paper. When feeding paper from the tray, the feed head pivots down each time a sheet is fed. As the paper supply drops, a Stack Height Sensor on the feed head is unblocked causing the elevator motor to turn on and raise the paper stack. When the Stack Height Sensor is blocked the Elevator Motor stops. This is done while the machine is feeding paper and does not interrupt paper feed. When the paper supply is exhausted, the last sheet leaving the tray exposes an opening in the paper plate and allows the No Paper Actuator to drop into the opening. In doing so, it unblocks the No Paper Sensor, which signals the control logic to stop paper feed, and lower the paper tray elevator. The machine stops and displays an Add Paper condition on the User Display Screen



## Paper Tray 3 - Paper Handling Module

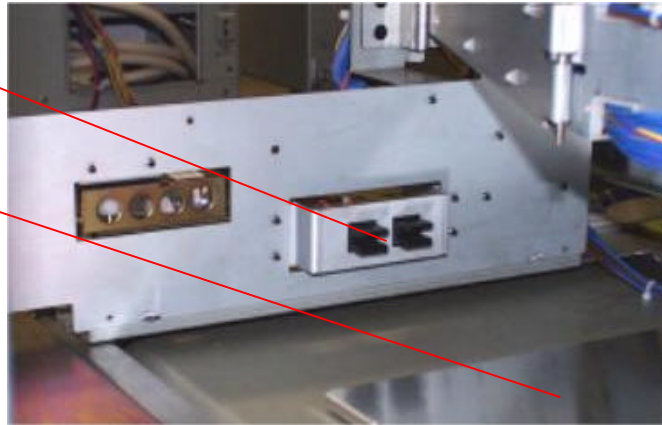
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### Tray 3 Operational Overview (continued)

Tray 3 has a Paper Supply Sensor Assembly (see next page) that signals the control logic to display the amount of paper in the tray. Pulling Tray 3 out of the machine activates the Tray 3 Interlock Switches. This sends a signal to the control logic to reverse the Elevator Motor and to lower the paper elevator for loading. A Tray Down Sensor is actuated when the paper plate reaches the down position and the Elevator Motor stops. The paper elevator is also lowered when the No Paper Sensor signals the control logic that the tray is empty.

Tray 3 Interlocks

Tray 3 Paper Heater



## Paper Tray 3 - Paper Handling Module

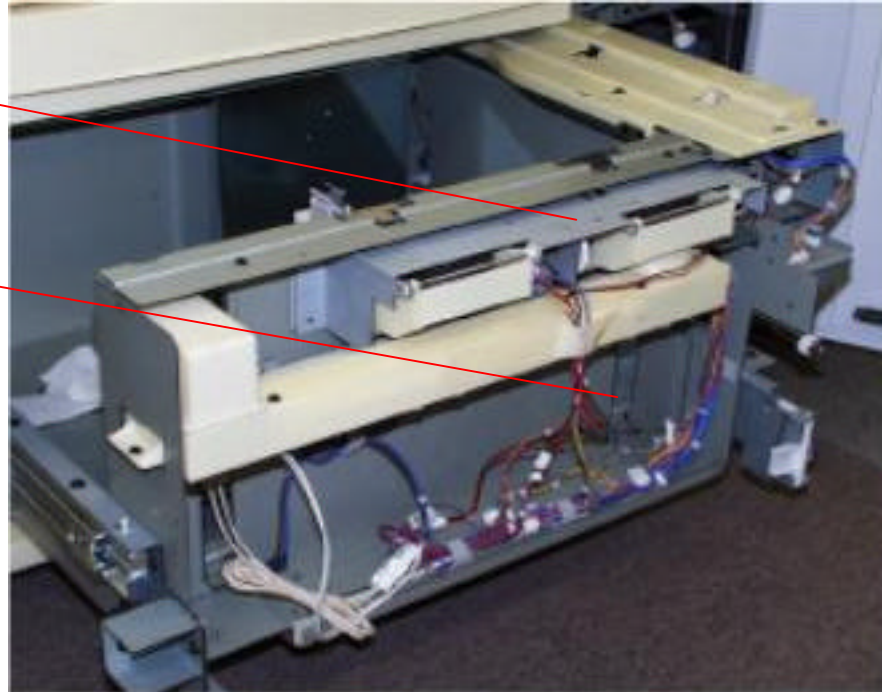
### Tray 3 Operational Overview (continued)

When paper is loaded and the tray is pushed back into the machine the control logic will raise the paper stack until the Stack Height Sensor is actuated, signaling the Elevator Motor to stop. When the stack is in the feed position the control logic signals the **Blower Motors** and Tray 3 Feed Motor to turn on and feed a sheet of paper to the Pre Feed Sensor. The Tray is now ready to feed paper.

Tray 3 Blowers

Paper Supply  
Sensor Assembly  
Actuator

**NOTE:** (Sensor  
located on Tray 3  
Front Cover)

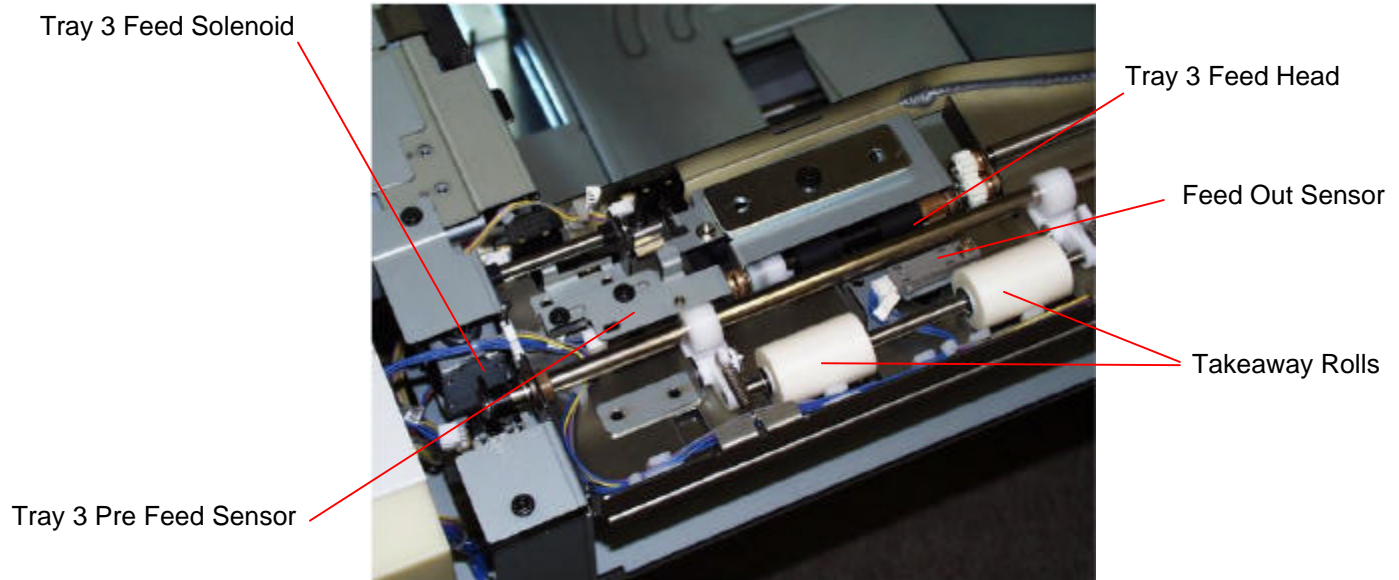


## Paper Tray 3 - Paper Handling Module

### Tray 3 Operational Overview (continued)

When the control logic receives a Tray 3 Print signal, the Tray 3 Feed Motor turns on and provides drive to the Nudger Rollers in the Tray 3 Feed Head. While the rolls are turning the Tray 3 Feed Solenoid actuates and pivots the feed head down. The rolls will grab the top sheet in the paper tray and feed it to the Takeaway Roll. As the paper enters the take away nip the Tray 3 Feed Solenoid deactuates and the feed head pivots up off the paper stack. These actions occur each time a sheet of paper is feed from the tray.

When the tray is feeding paper, a Feed Out Sensor checks for jams and misfeeds. The Tray 3 Pre Feed Sensor monitors the paper leaving the Feed Head to detect if a sheet has been fed.



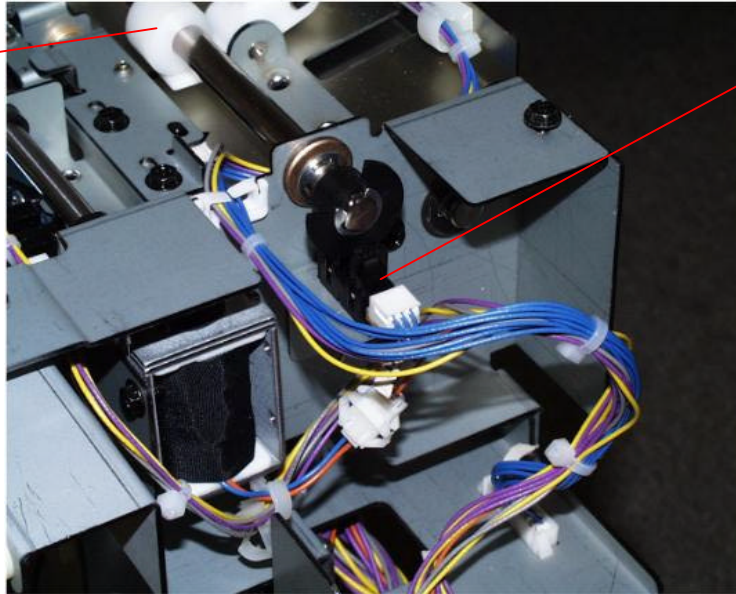
## Paper Tray 3 - Paper Handling Module

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### Tray 3 Operational Overview (continued)

When the sheet leaving Tray 3 enters the first set of rolls in the Transport Module, the Takeaway Rolls Pinch Release Motor (see Tray 3 Motors) rotates the Pinch Roll Release Cam. The cam lifts the Takeaway Idler Rolls and releases the sheet. A Takeaway Roll Sensor, signals the Control Logic that the Pinch rolls are up or down.

Pinch Roll  
Release Cam



Takeaway Roll Sensor