

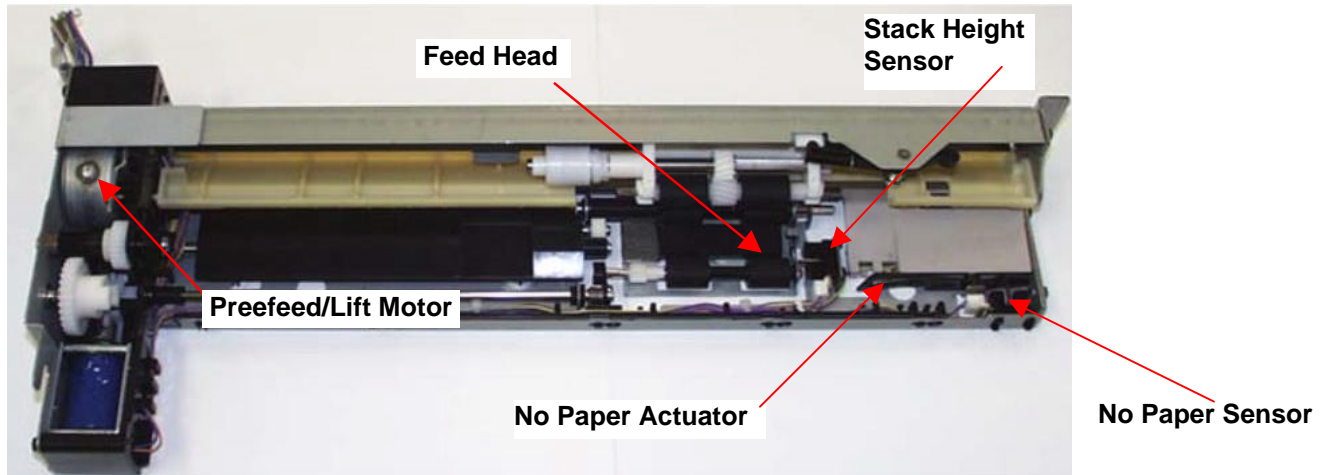
Paper Tray 1 & 2 – Paper Handling Module

Trays 1 and 2 Paper Feed Sensors

There are 3 feed head sensors in Trays 1 and 2, the No Paper Sensor, the Stack Height Sensor and the Prefeed Sensor.

No Paper Sensor

The No Paper Sensor detects if there is paper in the tray. When the last sheet is fed from the tray, the No Paper Actuator drops down into a hole in the Paper Plate and blocks the No Paper Sensor. This signals the control logic to shut down the machine and to display a "no paper message" on the UI screen. Pulling out the Tray opens the interlock and allows the Paper Plate to drop. This also allows the Feed Head to drop, which unblocks the Stack Height Sensor. When paper is loaded in the tray, the actuator hole is blocked by the paper. When the tray is inserted into the machine the interlock is closed and the control logic turns on the Prefeed/Lift Motor.



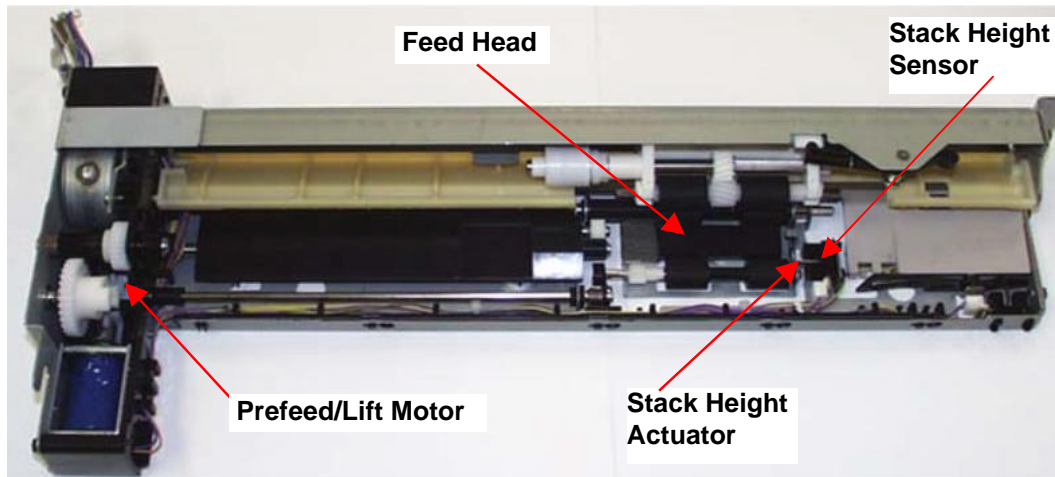
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Trays 1 and 2 Paper Feed Sensors (Continued)

The Motor lifts the paper/paper plate, the No Paper Actuator and the Feed Head until actuator on the Feed Head blocks the Stack Height Sensor. Blocking the sensor signals the control logic that the stack is in feed position. The control Logic signals the Lift Motor to stop and turns off the "no paper message".

Stack Height Sensor

The Stack Height Sensor monitors the height of the paper stack height to the Feed Head. A Stack Height Actuator, mounted on the Feed Head, blocks the sensor when the stack is at the correct height. Each time a sheet of paper is fed from the tray, the Feed Head and actuator drop lower.



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Trays 1 and 2 Paper Feed Sensors (Continued)

When the actuator drops approx. 5mm, it unblocks the Stack Height Sensor, and signals the control logic to turn on the Pre Feed/Lift Motor to raise the paper. When the paper raises the Feed Head and blocks the Stack Height Sensor, the Lift Motor Stops and normal feed resumes.

Pre Feed Sensor

Pre Feed Sensor monitors the length and the time it takes the paper to leave the tray. If a discrepancy is detected, the control logic will declare a machine fault and shuts down the machine paper.

