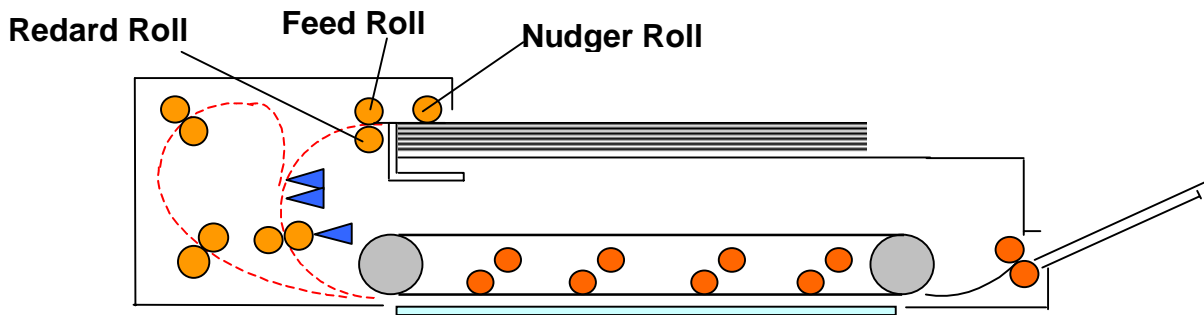


Document Prefeed and Feed - Document Handling Module

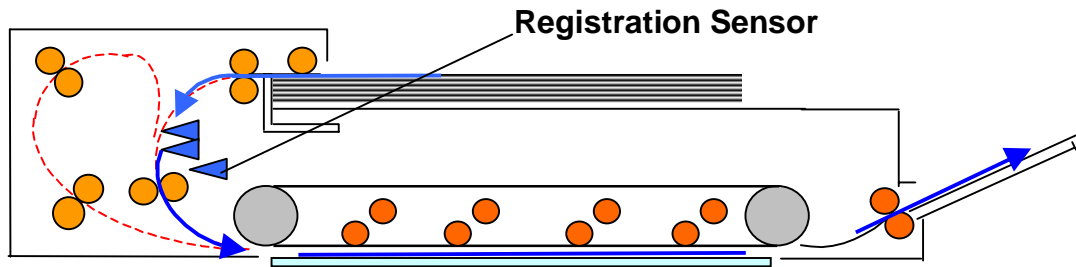
Prefeed and Feed Operation

The document Prefeed and Feed operation is activated when the Start Button is pressed. This energizes the Feed Motor, which drives both the Nudger Roll and Feed Roll. The Nudger Roll feeds the top document into the nip of the Feed Roll and the Retard Roll. The Feed Roll transports the document, one sheet at a time, into the DADF. The Feed Rolls work against friction Retard Rolls to assure single feed operation.

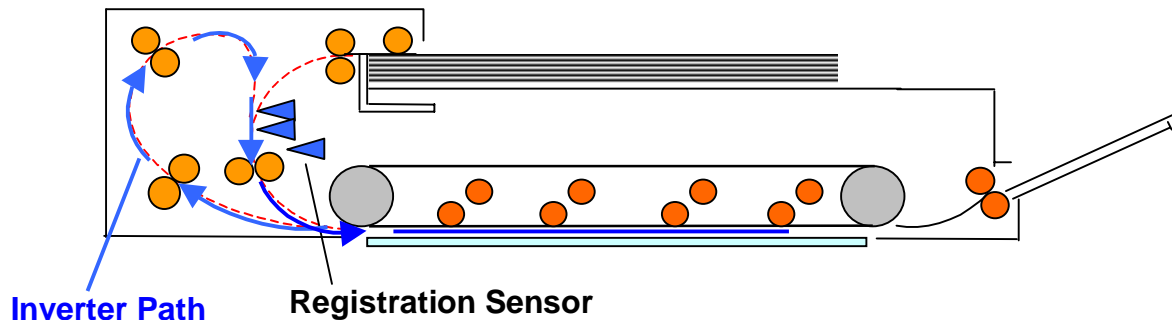


Document Prefeed and Feed - Document Handling Module

Prefeed and Feed Operation (continued)



- For single sided documents, the new document sheet is not fed from the Input Tray Assembly until the current document sheet passes and clears the DADF Registration Sensor.



- For two-sided documents, the new document sheet is not fed from the Input Tray Assembly until the current document sheet has been inverted through the DADF inverter path and clears the DADF Registration Sensor a second time.

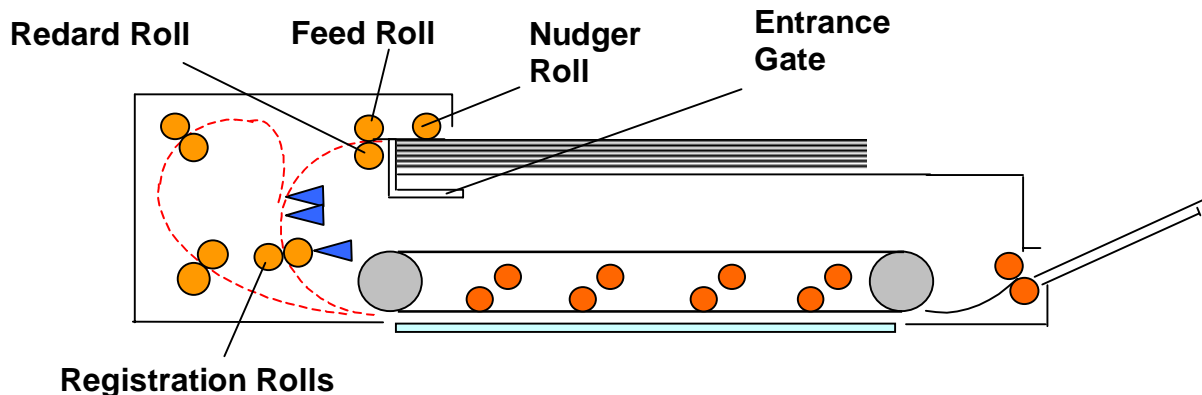
Document Prefeed and Feed - Document Handling Module

Prefeed and Feed Operation (continued)

- For two-sided documents to be re-inverted, the new document sheet is not fed from the Input Tray Assembly until the current document sheet has been sent through the DADF inverter path a second time, and it passes and clears the Registration Sensor for a third time.

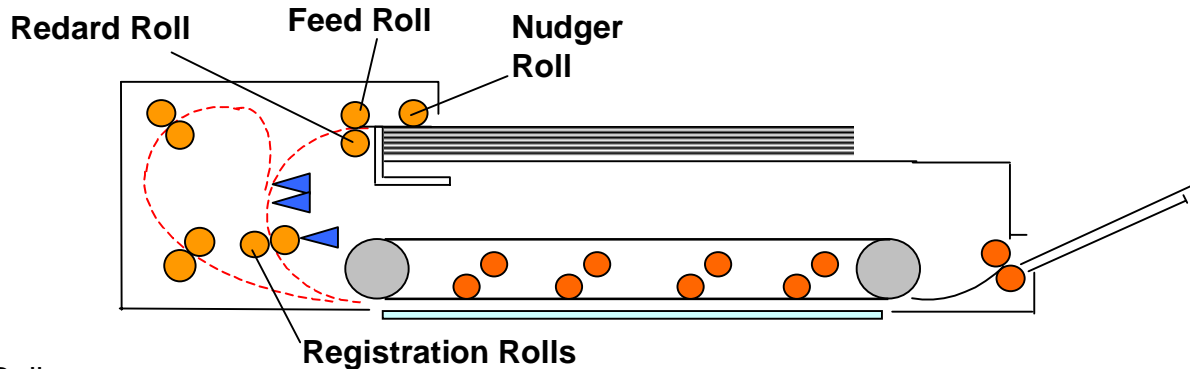
Nudger Roll

When the Entrance Gate is in the up position, it holds the Nudger Roll up so that documents can be loaded into the Input Tray. When the Start Button is pushed on the machine, the Entrance Gate drops. This allows the Nudger Roll to drop onto the top document and feeds the sheet into the nip of the Feed Roll and the Retard Roll. The Feed Motor drives the Nudger Roll through a belt drive, and operate in one direction using internal one-way clutches.



Document Prefeed and Feed - Document Handling Module

Prefeed and Feed Operation (continued)



Feed Roll

The Feed Motor drives the Feed Rolls through a belt. The Feed Rolls rotate in only one direction, using a one-way internal clutch. The Feed Roll transports the document from the Input Tray Assembly, past the Registration Sensor and into the nip of stationary Registration Rolls. The Feed Motor deenergizes 50 msec after the Registration Sensor senses the lead edge of the document. Momentarily stopping the document in the stationary Registration Rolls de-skews the document.

Retard Roll

The Retard Roll is not motor driven. This roll uses internal one-way clutches to provide the needed friction resistance for single sheet feed operation. A spring lever rests against surface of the Retard Roll inside the mounting assembly. The lever rotates the Retard Roll a small amount each time the Retard Roll is pushed down and released by a passing document. This movement prevents uneven wear around the Retard Rolls.