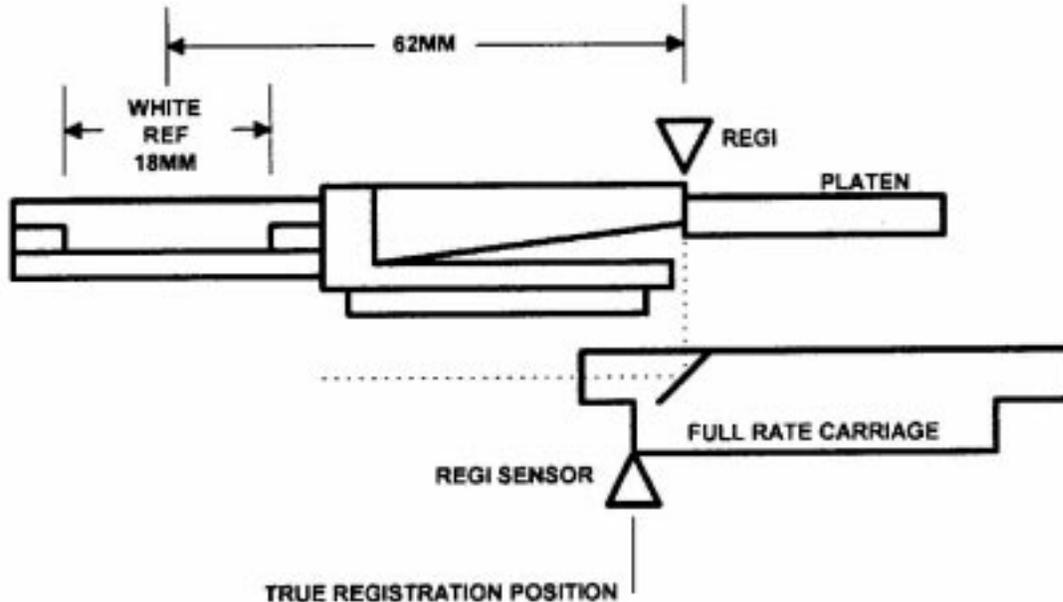


Scanning the Document - Image Input Terminal

Scanning the Document

The True Registration Position is where the Full-Rate Carriage begins to scan the document original. It occurs where the IIT Registration (Regi) Sensor detects a particular left edge on the Full-Rate Carriage. All other carriage positions are calculated relative to True Registration Position.

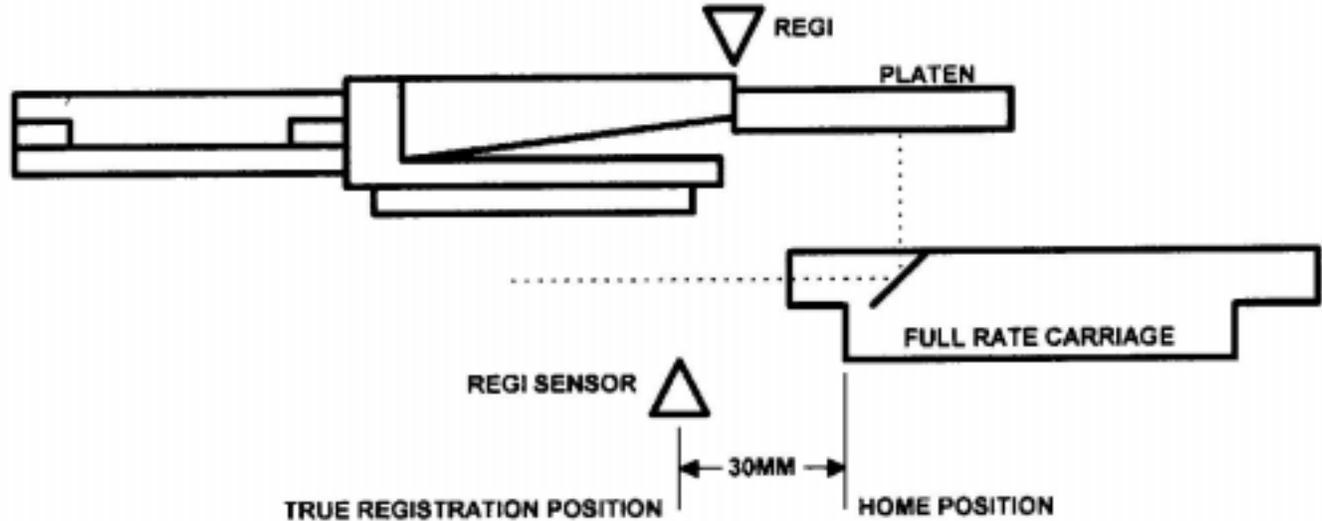
NOTE: Refer to the next three diagrams for document scanning description.



1. Home and Start Position of Full Rate Carriage #1(With DADF)

Scanning the Document - Image Input Terminal

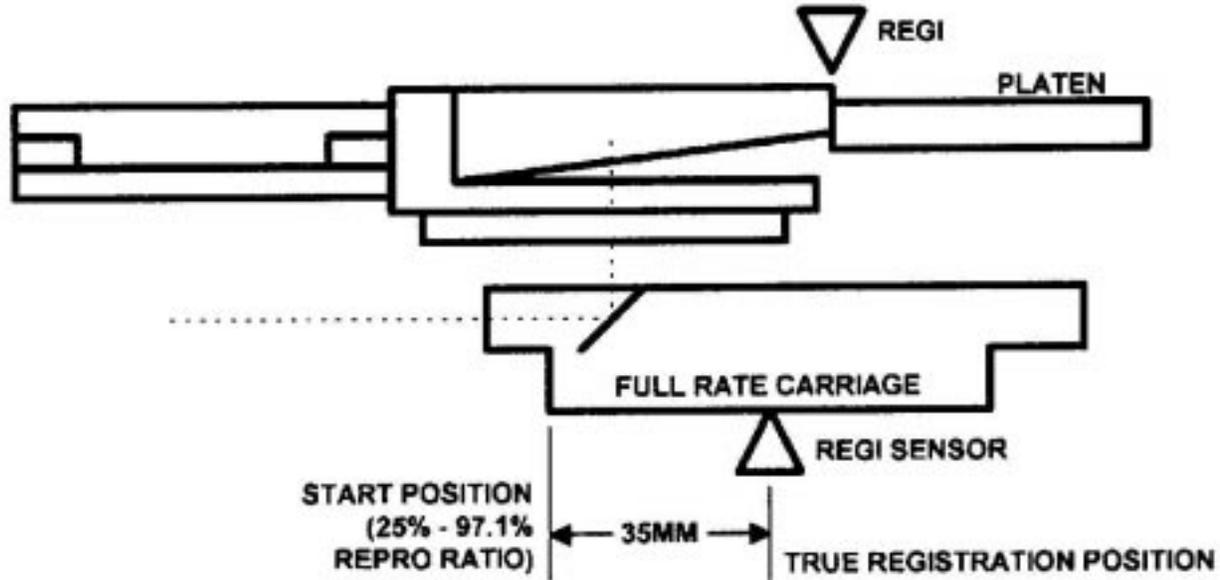
Scanning the Document (continued)



2. Home and Start Position of Full Rate Carriage (With DADF)

Scanning the Document - Image Input Terminal

Scanning the Document (continued)



3. Home and Start Position of Full Rate Carriage (With DADF)

Scanning the Document - Image Input Terminal

Scanning the Document (continued)

Carriage Positions

The White Reference Position is where the CCD Array is directly under the middle 100 pixels of the White Reference Strip. This is 62 mm to the left of the True Reference Position.

The Home Position is where the Full-Rate Carriage rests after initialization and between jobs. In all machines (with and without a DADF installed), this is 30 mm to the right of True Registration Position. This location places the CCD array under the document original. Therefore, the CCD array is used to detect the Fast-Scan dimension of the original document.

The Start Position is where the Full-Rate Carriage begins moving when scanning. In the interval between the Start Position and the True Registration Position, the carriage accelerates to the appropriate speed for the selected image reproduction ratio. All possible start positions are given in the Table, and an example is shown in preceding diagrams. Since the Full-Rate Carriage moves faster at lower magnifications, a longer acceleration distance is required and the Start Position is further from the True Registration Position.

NOTE: The Scanning speed of the Full Rate Carriage/Half Rate Carriage is determined by the following formula:

Scanning Speed = $225 \times 100 / \text{magnification}$ (mm/s) for 50 - 400% magnification
Scanning Speed = $225 \times 100 / (\text{Magnification} \times 2)$ (mm/s) for 2 to 49% magnification

Scanning the Document - Image Input Terminal

Scanning the Document (continued)

Full-Rate Carriage Start Positions

Configuration:	Reproduction Ratio	Start Position (Relative to True Registration Position)
With DADF	25% to 97.1%	35 mm Left
With DADF	97.2% to 400%	15 mm Left

The End Position is the furthest that the Full-Rate Carriage travels when finishing a scan. The maximum possible distance between the End Position and the True Reference Position is approximately 432 mm or 17 inches. However, the Slow-Scan dimension of the document original may be less than this. (The size of the original can be detected automatically or entered manually, see Document Size Detection.) The carriages will travel no further than necessary for the originals Slow-Scan dimension.