

Model:

LaserBase MF6530
LaserBase MF6540PL
LaserBase MF6550
LaserBase MF6560PL
LaserBase MF6580PL

Ref No.:

MF6500-007
(F9-T01-M00-10018-01)

Date:

September 2006

Location:

Service Manual

Subject:

Service Manual (change by improving image parallelism)

Reason:

In the course of changes made to improve the image parallelism, the registration roller has undergone structural changes. As it is incompatible with the old roller, a new disassembly procedure has been added to the Service Manual. As the image parallelism adjustment previously performed in conjunction with the height adjustment of the fixing unit is now done by changing the spring pressure of the registration unit, a chapter describing the adjustment procedure has been added.

Particulars:

1. Parts replacement procedure > Pickup/Feed System > Removing the Registration Roller
2. Maintenance > Adjustment > Image Adjustments > Image parallelism adjustment
3. Maintenance > Adjustment > Fixing System > Height Adjustment of the Fixing Unit

Details:

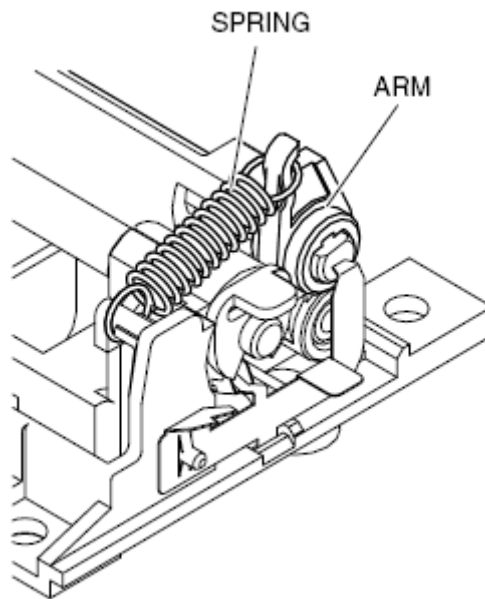
The following shows the additional contents.

1. Parts replacement procedure > Pickup/Feed System > Removing the Registration Roller

The registration unit is available in two types. The spring of one type is hooked on the arm and the spring of the other type is hooked on the frame.

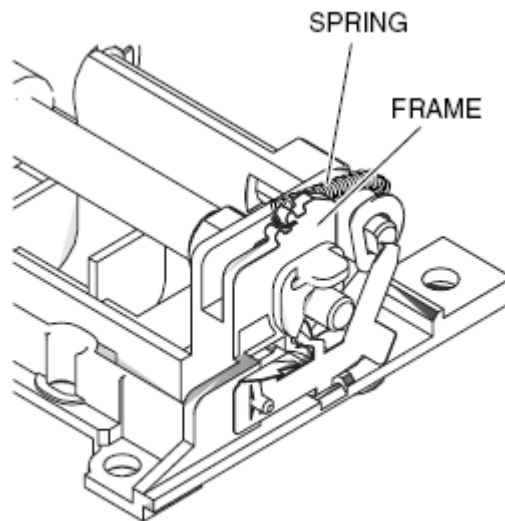
The parts in these two types of registration units are not compatible with each other. When replacing any defective part in a registration unit, use a new part of the same type as that of the defective part.

1. The type of spring hooked on the arm



F-1

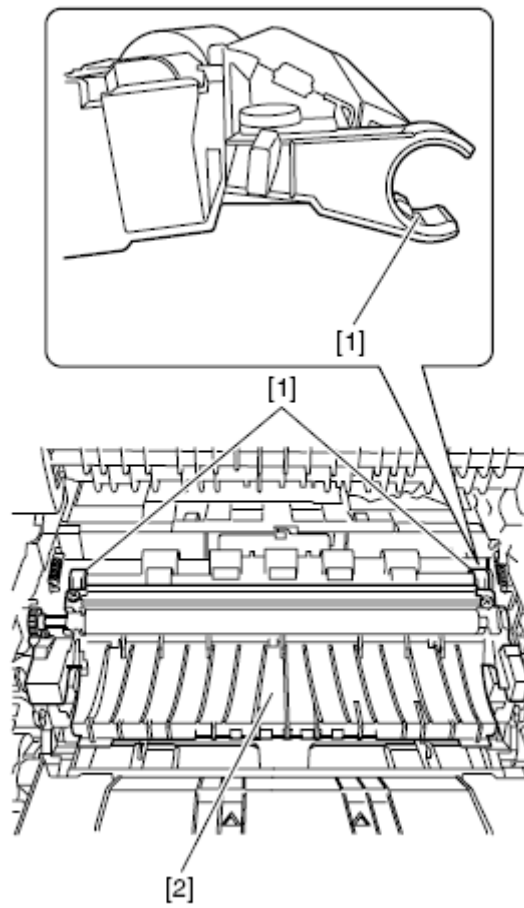
2. The type of spring hooked on the frame



F-2

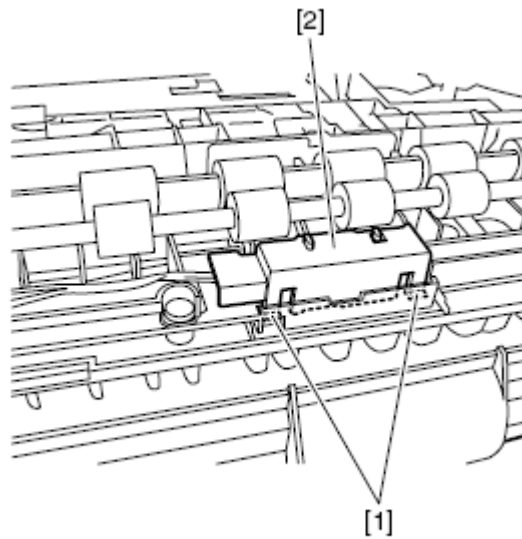
2. Removing the Registration Roller (The type of spring hooked on the frame)

- 1) Remove the front cover, the rear cover and rear-left cover.
- 2) Remove the registration clutch.
- 3) Remove the two shafts [1], and then remove the transfer guide [2].



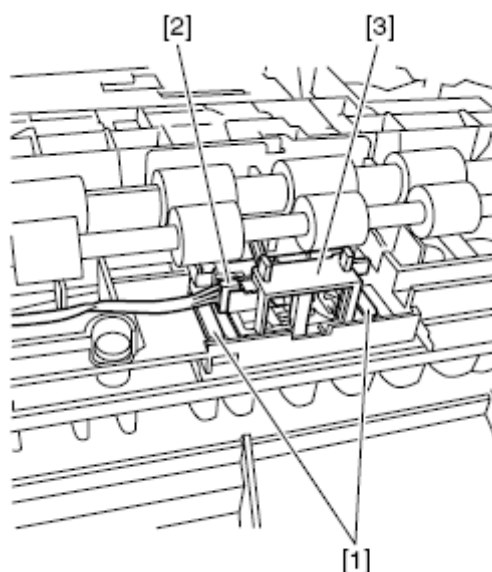
F-3

4) Release the two hooks [1], and then detach the registration sensor cover [2]



F-4

- 5) Remove the two bosses [1], disconnect the connector [2], and then slide the registration sensor unit [3] toward you to remove it.



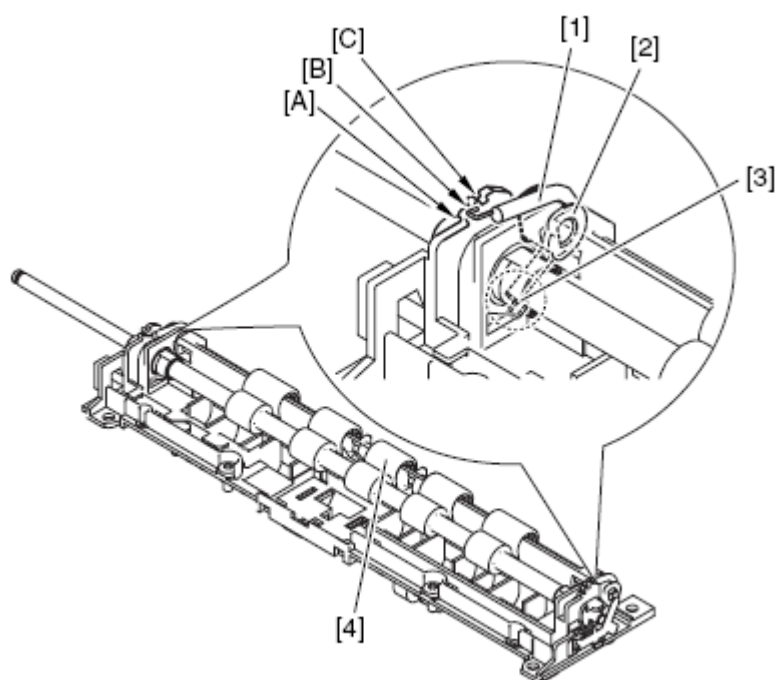
F-5

- 6) Make a note of the positions ([A] to [C]) of two springs [1]. Next, remove the two springs [1].



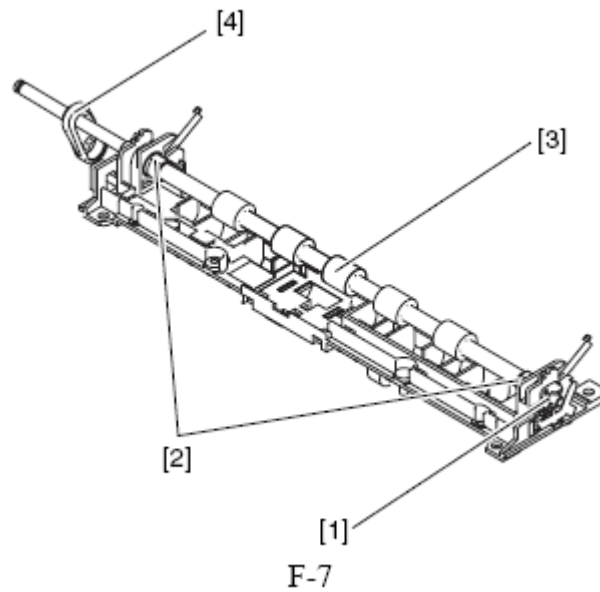
Each spring can be hooked at one of three positions. It is factory-hooked at the appropriate position for image adjustment. Once you have removed a spring, be sure to hook it at the original position. Install the red spring in the rear side, and install the colorless one in the front side.

- 7) Remove the two bearings [2], and then remove the right registration roller [3].

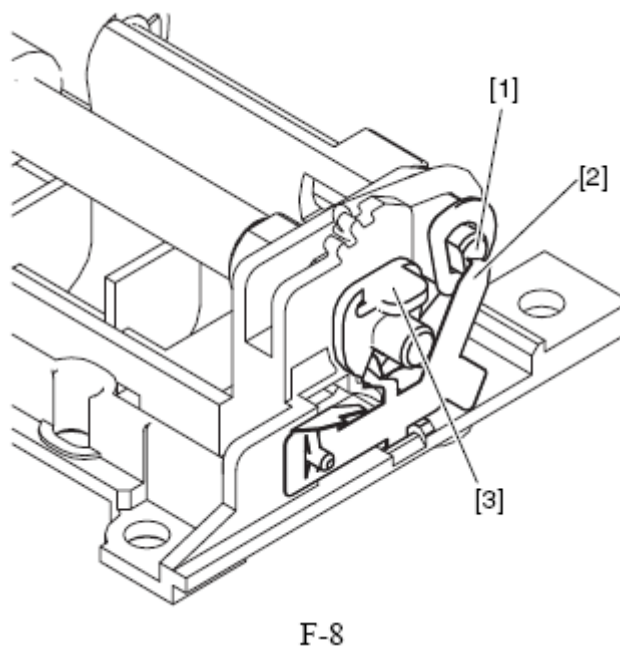


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- 8) Remove one E-ring [1], two bearings [2], and left registration roller [3]. Then remove the left registration roller [3] from the shaft support. When reinstalling the shaft support, be sure to check installing the shaft support.

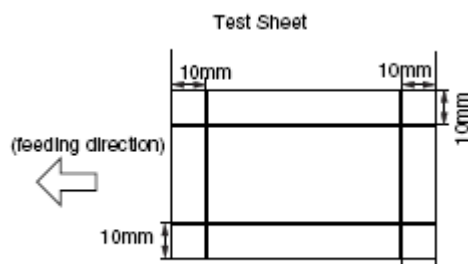


When reinstalling the right registration roller, the grounding spring [2] must be in touch with the end [1] of this roller. It is recommended to use tweezers when reinstalling the E-ring [3].



2. Maintenance > Adjustment > Image Adjustments > Image parallelism adjustment

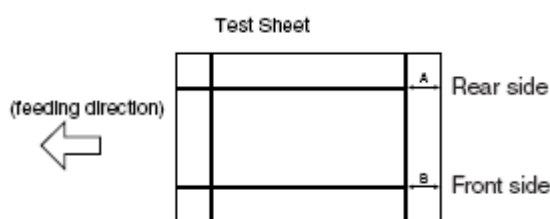
1) Create a test chart, load it in the ADF, and make a copy of it.



F-9

2) Compare the lines at the end of the test chart with those on the copy for parallelism. Measure dimensions A and B at the end of the copy and adjust the amount of skew (the range shown in the table) to within the spec.

Standard: A-B within $\pm 1.7\text{mm}$



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<Adjustment method>

This machine allows parallelism between the leading and trailing edges of the image to be adjusted by changing the positions where the front and rear springs of the registration unit are hooked.

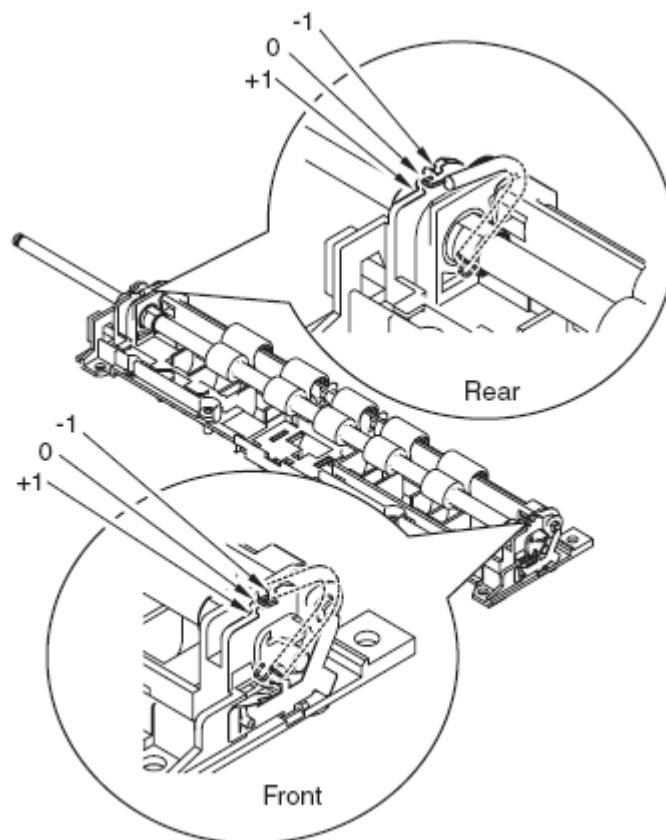
There are five types of spring hooking positions. (One step = Approx. 0.6 mm)

T-1

Settings	Spring positions at the back of host machine	Spring positions at the front of host machine
1	+1	-1
2	+1	0
3	0	0
4	-1	0
5	-1	1

MEMO:


Parallelism varies depending on the difference in the spring pressure between the front and rear springs.
 For example, the spring position “0” at the back of the host machine and the spring position “-1” at the front of the host machine are not shown in this document because they are the same as the spring position “+1” at the back of the host machine and the spring position “0” at the front of the host machine respectively.



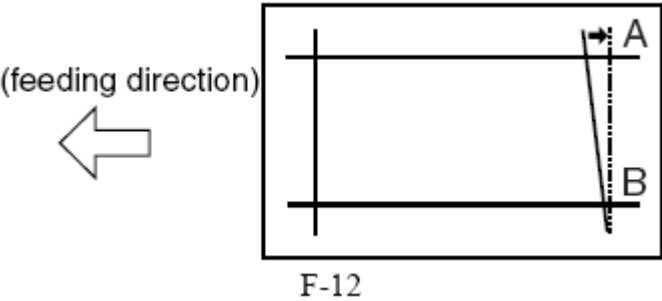
F-11

- 1) Check the current hooking positions of the left and right springs of the registration roller. Change the spring hooking positions in reference to the table below. (They are adjustable in five steps. One step = Approx. 0.6 mm)

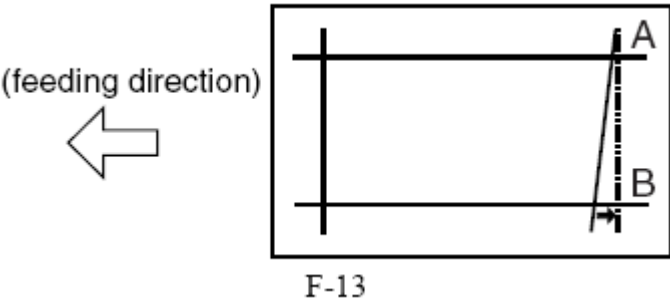
T-2

	Settings	Spring positions at the back of host machine	Spring positions at the front of host machine
Correction of image A (The A-side extends.)	1	+1	-1
	2	+1	0
	3	0	0
	4	-1	0
Correction of image B (The B-side extends.)	5	-1	1

- If the A-side image (at the front of the host machine) is short (shrunk), reduce the setting value.



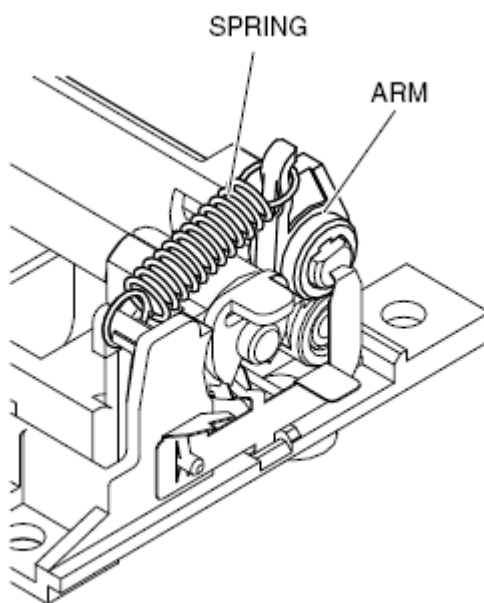
- If the B-side image (at the back of the host machine) is short (shrunk), increase the setting value.



3. Maintenance > Adjustment > Fixing System > Height Adjustment of the fixing unit



Perform the adjustment as described below for the type where the spring of the registration unit is hooked into the arm. For the type where the spring of the registration unit is hooked into the frame, refer to Measurement and Adjustments > Image Adjustments > Image parallelism adjustment.



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