This guide will show you how to use the microfiche readers to adjust and print images from microfiche and microfilm. If you have any questions, contact the Government Documents Librarian, Dr. Lynn Monkres. This guide will cover the following topics:

- Selecting the Appropriate Lens
- Changing Lenses
- Adjusting Lenses
- Adjusting and Printing Microfiche Images
- Adjusting and Printing Microfilm Images

Selecting the Lens

All microfiche do not have the same level of magnification. Sometimes, you will need to change the lens in the microreader to see the microfiche clearly.

Microfiche lenses come in three different sizes
- Type 1: 9x-16x
- Type 2: 13x-27x
- Type 3: 23x-50x

Type 2 lenses are already in the microfiche readers and should be suitable for reading most microfiche. Type 1 and Type 3 lenses are located in the top drawer in the small table next to the MSP 6000 fiche reader.

Most of the microfiche in the collection is 24x source (one page per image). The Type 2 lenses already in the machines will magnify fiche most effectively. There are a few sets of microfiche that contain oversized documents which were filmed at 15x or 36x. Documents filmed at 36x require the Type 3 lens to read.

In general, it is best to leave the Type 2 lens in the reader because it will properly magnify most fiche in the collection. If you find that you need more or less magnification, change the lens.
Changing Lenses

Changing the lenses in the microfiche readers is simple. Use the following steps to guide you through the process.

1. Locate the prism holder just above the lens. It is a grey tab labeled “push”. Push the prism holder up; away from the lens. This releases the lens from the machine.

2. Pull the lens out of the guide (this may require a little force).

3. Slide the new lens into the machine along the lens guide. The lens will snap into place.
Once the new lens is in place, you are ready to begin using the microform reader.

**Adjusting the Lens**

Microfiche Lenses are easily adjustable once in the machine. Each lens has two dials on top. The blue dial controls magnification while the gray dial focuses the image.

- **Blue Dial:**
  - Move the blue dial clockwise (left) to reduce magnification, and counterclockwise (right) to increase magnification.

- **Gray Dial:**
  - Adjust the lower gray dial until the image becomes clear.

- **Brightness Selector:**
  - Pull out the lever below the fiche tray, called the brightness selector. Adjust to the appropriate position for the type of lens that has been loaded. The lever will click into position when it is set.
Adjusting and Printing Microfiche Images

Begin by turning on the microfiche reader and printer. Flip the power switch on the right side of the microfiche reader to turn it on. The power switch for the printer is on the left side of the printer.

The microfiche reader and printer need a moment to warm up. The digital screen on the control panel will blink while this occurs. Wait until the digital screen reads “1” to proceed.

Pull out the tray so that the two pieces of glass separate. Place a piece of microfiche FACEDOWN between the glass plates and push it back under the lens. An image of the fiche will appear on the screen above.
Rotate the grey knob until the image on the screen points in the desired direction.

Push and pull the guide in all directions to move between pages. Locate the page you would like to print, and center it on the screen. Use the markings on the screen to help align the image.

Use the controls on the lens to adjust magnification and clarity of the image. Each lens has two dials on top. The blue dial controls magnification while the gray dial focuses the image.
When the image is clear and centered on the screen, press the blue Start button to print the page on the printer below. The digital screen above the print button indicates that the page can be printed when the display reads “1”. The reader will automatically adjust the print settings for the document. To make adjustments to the printed copy, use the buttons on the right control panel.

Press the blue Start button to print the page.

Use the buttons on the control panel to make adjustments to the final print-out.

Make images darker or lighter using these buttons.

Adjusting and Printing Microfilm Images

Begin by turning on the microfiche reader and printer. Flip the power switch on the right side of the microfiche reader to turn it on. The power switch for the printer is on the left side of the printer.

The microfiche reader and printer needs a moment to warm up and get ready. Wait until the digital screen to the right of the reader screen reads “1” to proceed.
Slide the film onto the left spool. Pull the film under the guides, between the glass plates, and secure in the spool in the right.

Weave film under the guides and glass and over the right spool.

Thread the film over and through the slit in the spool. Turn the spool clockwise several turns until the film is secure.

Push the tray back into the reader so that the film is over the light. Adjust the tray until the film image appears on the screen.

Rotate the knob to change the direction of the film on the screen.

Move the tray up, down, left, and right to position the image.
Use the colored buttons on the tray to scroll through the film. There are three scrolling speeds for moving through the film: slow, medium, and fast.

To adjust an image, use the same controls as for the microfiche: use the knob to rotate images, and the dials on the lens to zoom and sharpen the image.

Use the Start button to print the image. When finished, reroll the film by using the << button. Put the film back in its box and place in the “used fiche” box next to the readers.

For additional questions or concerns regarding the use of the microform readers, contact the Government Documents Librarian in room 330A or by phone at 202-319-5136.