

# FilmScan-USA

[www.filmscan-usa.com](http://www.filmscan-usa.com)

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## Film Holders for Nikon Film Scanner

Fits Nikon scanner models LS-5000, LS-4000, LS-50, V ED, LS40  
Will probably work (not tested) with LS-2000, LS-20

Holder Part # FH-110 / film type = 110, Pocket Instamatic, Most 16mm  
Holder Part # FH-126 / film type = 126, Instamatic, 28mm square frame  
Holder Part # FH-APS / film type = APS cartage Note:must crack open cartage  
Holder Part # FH-MINOX / film type = MINOX, HIT, Most 9.4mm  
Holder Part # FH-8 = 8mm, Super 8, Most 8mm movie film  
Holder Part # FH-Custom / email for custom film size

Nikon Adapter Part # MA-21 / Single(one) frame.

Our Custom Adapter Part # MA-21-M / Multi frame.

Note: Your MA-21 may be easily modified to allow multiple frames (MA-21-M), see special instructions "modify your MA-21" at [www.FilmScan-USA.com](http://www.FilmScan-USA.com).



## Simple Step by Step Instructions

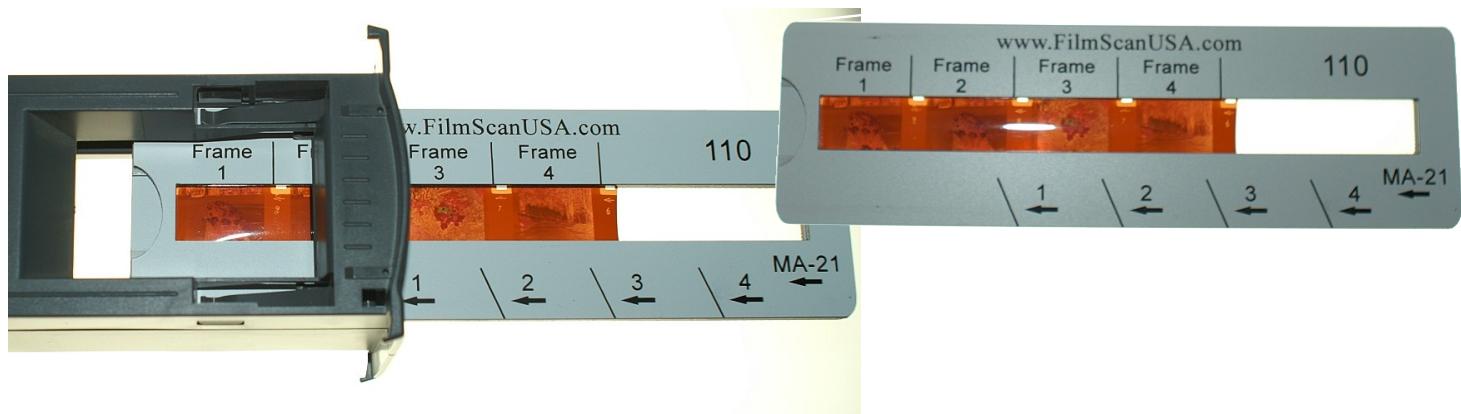
**1- Cut film:** Cut film into 1-4 frame strips (except MINOX).



Note: I'm using anti static film gloves

**2- Slide film into film holder:** Line up frame as shown in picture.

Note: MA-21-M is shown removed from scanner to show film frame alignment.



**3-Insert Film Holder Into Scanner (MA-21-M):**

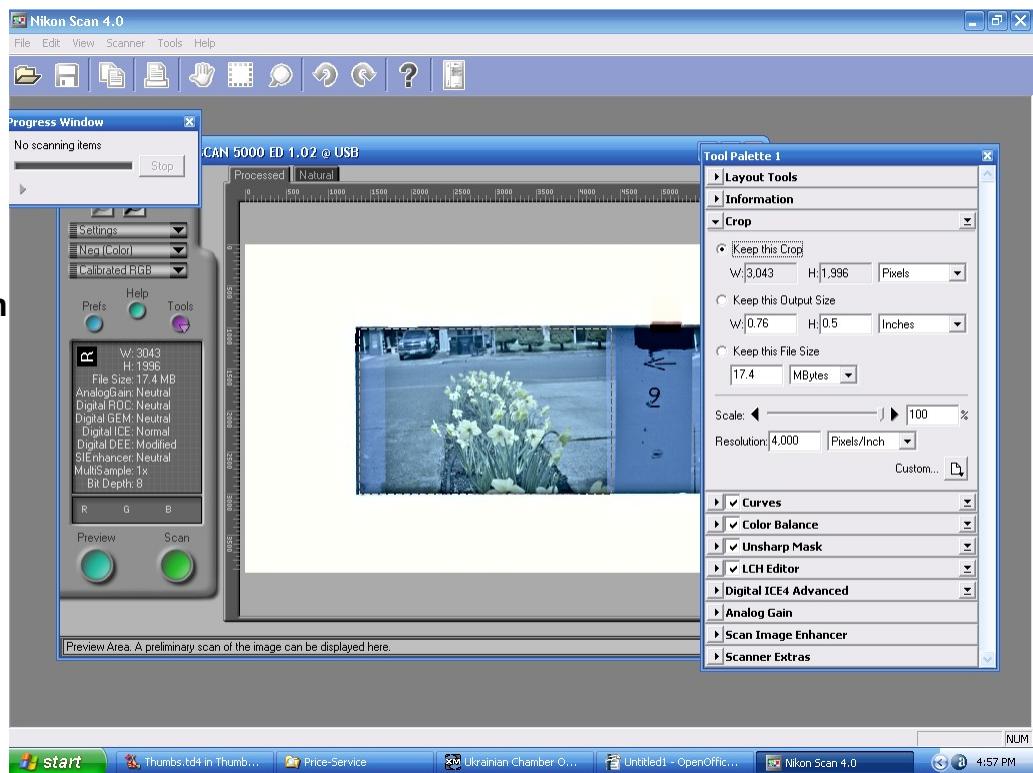
Carefully align arrow with front of MA-21-M as shown.

Push in to next number for frame 2, 3, 4, etc.

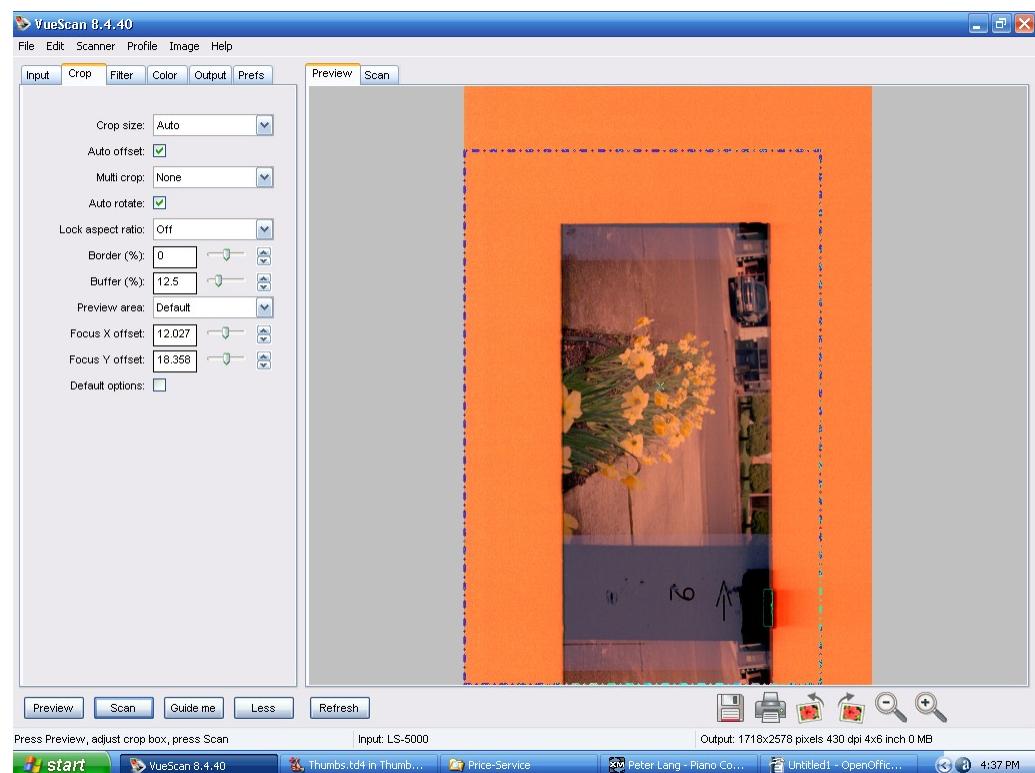


**4-Set Crop Box:** Left click mouse and drag to set crop box.

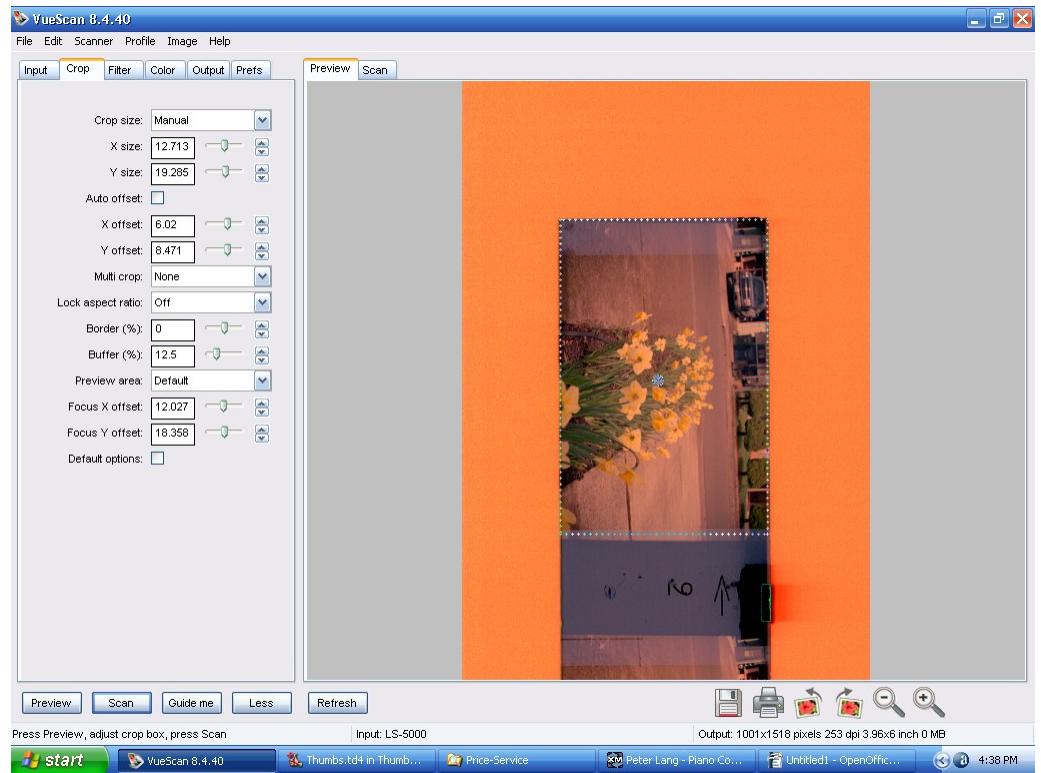
Setting crop box in  
“PREVIEW” with Nikon  
Scan software.



PREVIEW image in  
ViewScan Software

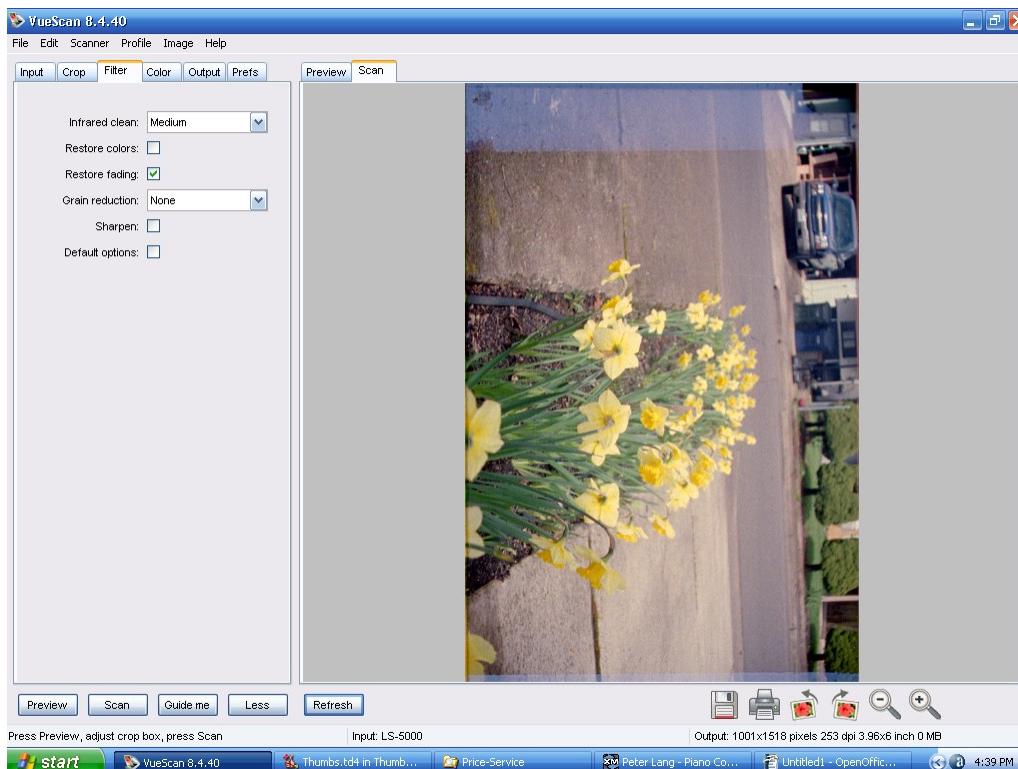


## Setting Crop Box in **ViewScan** Software



## Final SCAN in **ViewScan** Software

Note: In my opinion (whatever that's worth) **ViewScan** is easier to use and consistently produces a better quality image than other software.



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## Nikon MA-21-M (modified) Adapter

Fits Nikon scanner models LS-5000, LS-4000, LS-50, V ED, LS40  
Will probably work (not tested) with LS-2000, LS-20

Nikon Adapter Part # MA-21 / Single(one) frame.

Our Custom Adapter Part # MA-21-M / Multi frame.

**Introduction:** The standard Nikon MA-21 is designed for scanning 2"x2" slide mounts and 35mm negative strips using the Nikon FH-3 film holder. Our film holders will also work in standard MA-21, however only the first film frame is accesable.



The MA-21-M modification allows our film holders to push in past the first frame to frames 2, 3, 4, etc.

**MA-21 Modification Description:** The modification consists of "popping" the two halves apart and removing the metal slide stop and the white plastic eject finger, and cutting one plastic tab . This allows the film holder to push in past frame # 1 to frame #2, #3 and #4. To return to stock factory configuration simply "pop" halves apart and replace the metal stop and white plastic eject leaver.

## Simple Step by Step Instructions

**1- Place MA-21 upside down on work table**



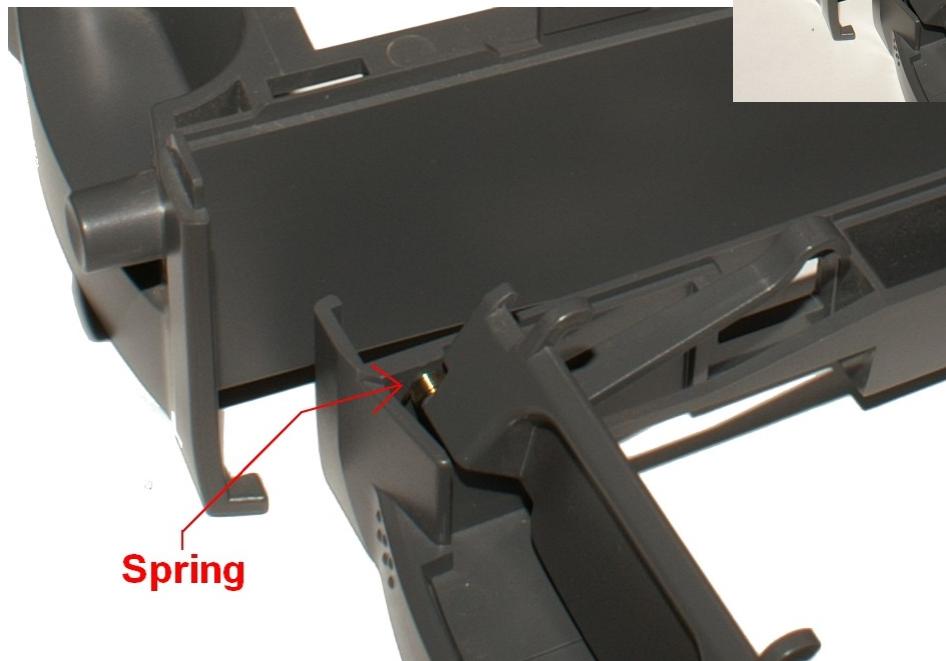


**2- Press in the four tabs (two on each side) and carefully pop the two halves apart.**  
Watch for the small chrome spring on the front door.



**3- Note spring in photo.** Do not remove spring or front access door shown. See spring in center below.

Please note I lost spring on my MA-21, however it functions without it. Door should be retained as it helps keep dust and stray light out of scanner.

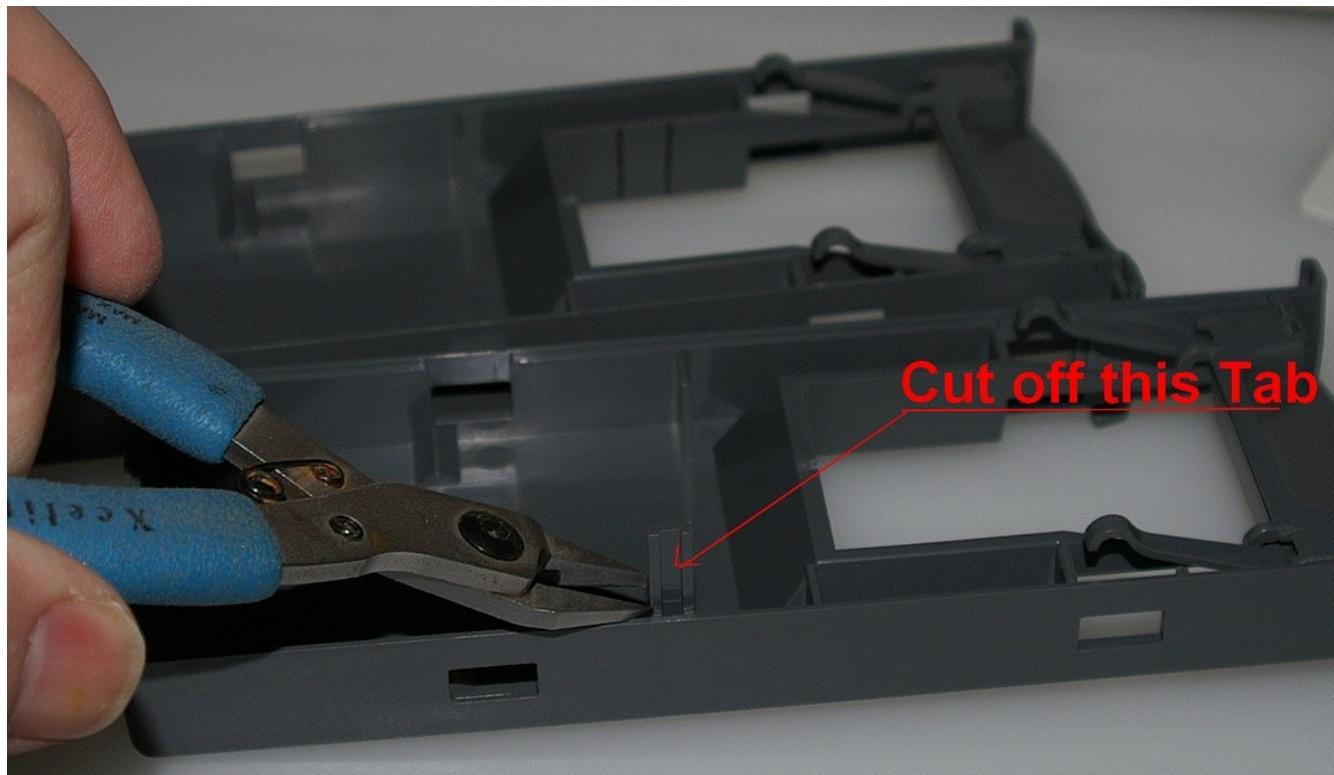


**4- Remove white plastic eject arm** with small Phillips screwdriver (large jewelers type driver).

**5- Slide out the black metal slide stop.**



**6-Cut Upright tab from top piece**

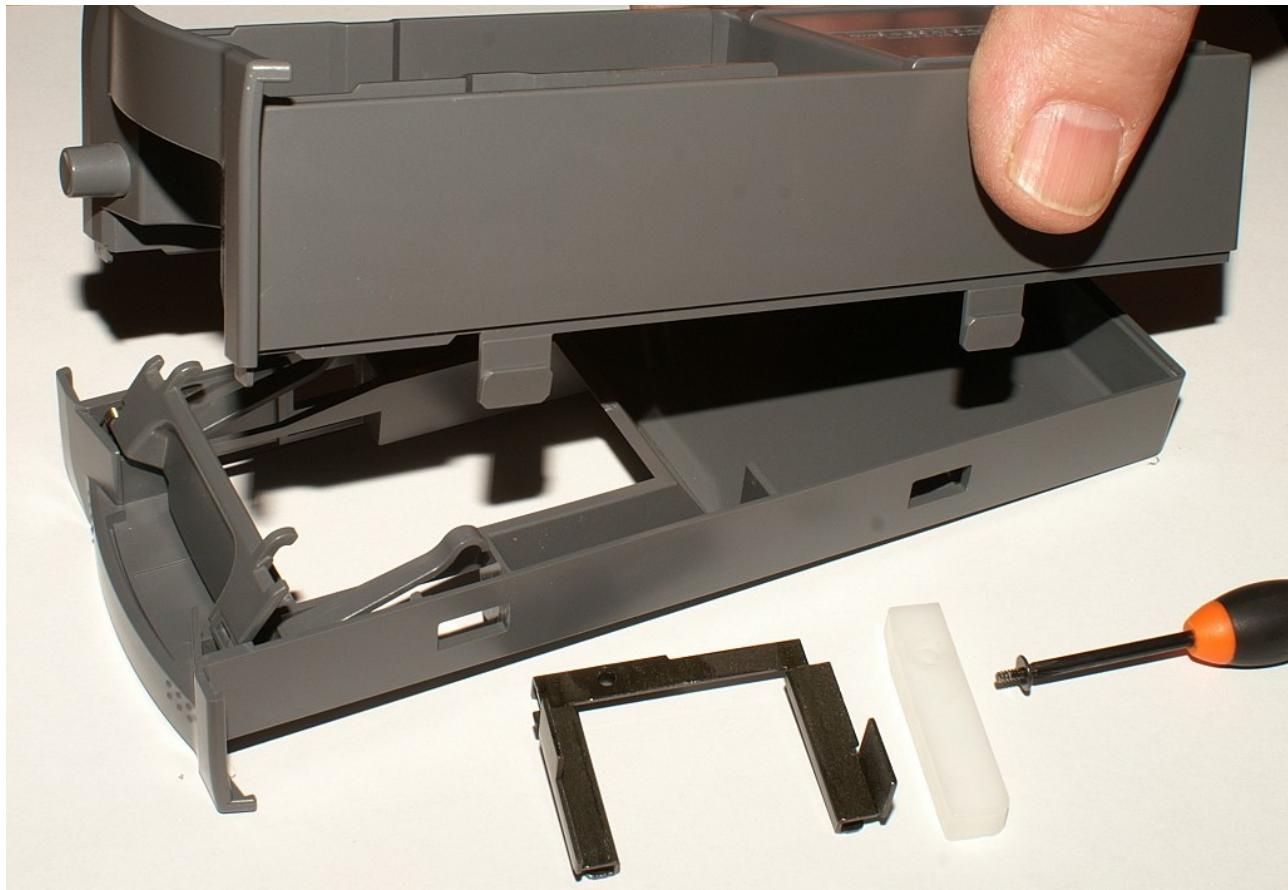


This seemingly useless tab will prevent film holder from inserting past frame #2

Use sharp wire side cutters or similar cutting tool. Cut as low as possible. If sharp edge it may need filing or sanding to smooth.

Important: Clean or blow out all plastic chips and dust, we don't want contaminants inside our scanner.

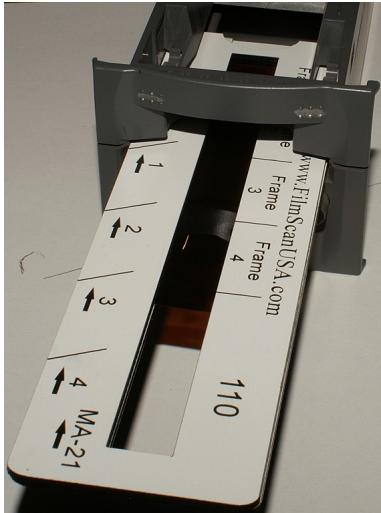
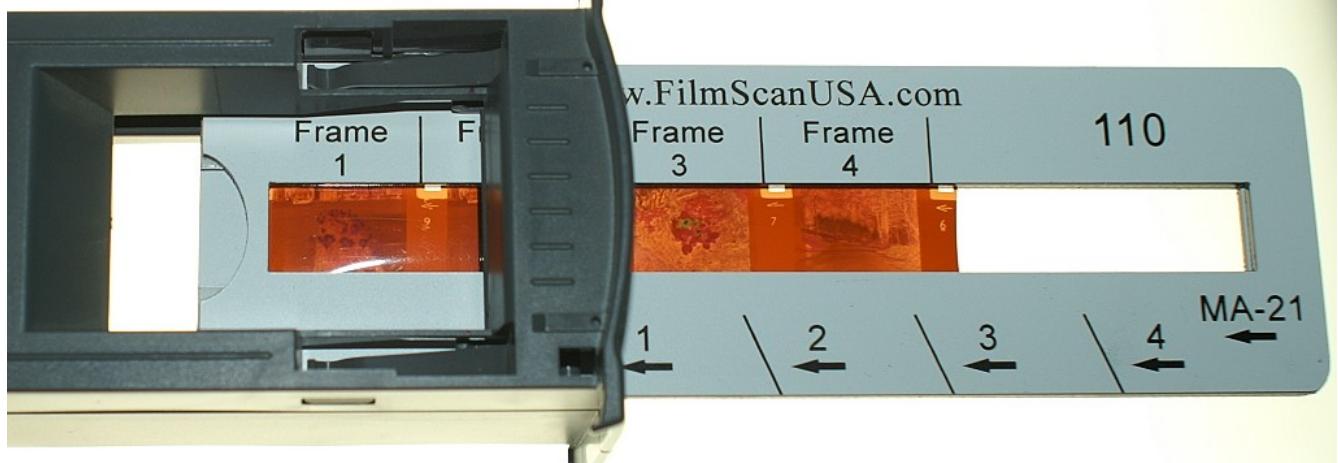
**Note: This tab appears to serve no useful function. MA-21 will function perfectly with this tab removed.**



**7- Snap halves back together.**



### MA-21-M Adapter with film holder.



## **General Notes**

**Film Holder Development:** With the help of my brother I developed these holders over time with a great deal of trial and error for “in house use” for my scanning service. All holders have been field tested with hundreds of hours and thousands of scan images.

**Aligning Film Holder:** There is a small learning curve for aligning the film holder. With practice you should be able to advance film with little or no re-adjustment of the crop box.

**ViewScan Moving Crop Box:** Hold down the “shift” key and left mouse button to easily move location of crop box. Be sure to keep the focus (\*) near center of film frame.

**ViewScan Focus:** To assure perfect image focus set “Input, Auto focus” to “Always”. Be sure to keep the focus (\*) near center of film frame.

**Purchasing additional MA-21:** I have purchased several Nikon MA-21 adapters from adarama.com and bhvideophoto.com for under 20.00 USD.

**Purchasing Modified MA-21-M:** I can sell a modified MA-21-M adapter, however it is usually better to order from Adarama or B & H doing the simple easy modification yourself.

**MA-21 Modification Instructions:** Simple step by step instructions with photo's go to our web site [www.filmscam-usa.com](http://www.filmscam-usa.com). This modification is non permanent and completely reversible to stock Nikon MA-21.

**MA-21 Modification Description:** The modification consists of “popping” the two halves apart and removing the metal slide stop and the white plastic eject finger. This allows the film holder to push in past frame # 1 to frame #2, #3 and #4. To return to stock factory configuration simply “pop” halves apart and replace the metal stop and white plastic eject leaver.

**Custom Film Size:** In addition to 110, 126, APS, 8mm, 16mm, and MINOX we can provide custom film sizes on request.

**Nikon Scanner Parts, Service and Repair:** One of my projects is producing a service manual for Nikon LS-5000 and LS-50 film scanners. If you need service or having problems email me.

**Film Holders for Other Scanners:** In addition to Nikon scanners I have or have access to film holders for the following scanner brands and models... Epson 4990, V700, V750 Canon 8600F. Email for more information.