

THE RENAISSANCE OF FILM PHOTOGRAPHY

The allure of vintage equipment & how to get your
old cameras and lenses working again

by Norm Smith & Ross Laing

KSCCC

February 7, 2025



#filmisdead

- 2006 – Nikon announced it was stopping the production of most film cameras
- 2007-2019 – steady and dramatic fall in the sale of film and rise of cellphone photography
- 2012 - Kodak files for bankruptcy
- 2015 – Black's closes all retail stores across Canada

#filmisdead

Shooting film makes no sense....

- More expensive – every shot costs money for film and processing; digital is “free”
- No assurance the image will turn out with no immediate feedback since you can’t check the LCD screen and wait until the film is developed
- More time consuming to take a photograph
- More difficult to learn to photograph using a film camera
- Images are not as sharp, grainy, and more likely to have imperfections

Signs of a rejuvenated interest in film photography?

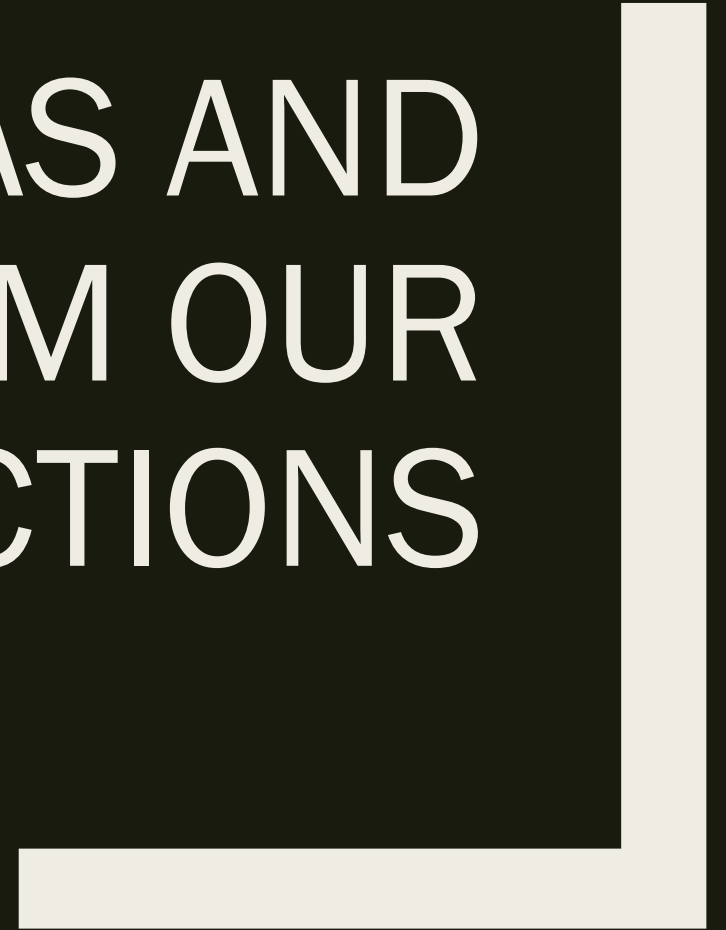
- 2018 – GPC Labworks in Ottawa sees year over year increases of 25% in film processing
- McBain Camera in Edmonton takes in over 60 rolls of film per day
- 2018 West Camera on Queen St W in Toronto develops over 100 rolls per day and can't keep up with demand
- Film has doubled in price in recent years to \$20-\$30 per roll; \$40 Online
- 2022 – Atlantic Photo Supply in Halifax has seen film sales rise 200% in last 5 years
- 2023 - Leica has scaled back production of digital cameras and ramped up manual film camera production to 40% of its new cameras
- 2023 - Flic Film in Longview, Alberta, produces 10,000 rolls of film per week
- Classic cameras like the Pentax K1000 and Canon AE1 can sell for up to \$1000 online
- 2024 – new half-frame film camera, the Pentax 17, is launched and very popular with GenZ

Some reasons for the film “renaissance”

N.B. the biggest resurgence in film photography has been amongst 18 to 25-year-olds

- Shooting film requires intentionality and mindfulness, along with a level of photographic knowledge and skill lacking with snapping a selfie with a cellphone
- Shooting film produces richer images with a greater dynamic range within one single shot, and a unique aesthetic that is less clinical and less “perfect”
- Shooting film takes more time and can be therapeutic, and avoids the “instant gratification” of checking the LCD screen
- Shooting film is “hands on” analogue, authentic, and a nostalgic rediscovery of a past technology like vinyl records

SOME CAMERAS AND LENSES FROM OUR COLLECTIONS



Arsenal Kiev 4AM (1970s)



- Copy of Zeiss Ikon Contax II/lia (1930s and 1940s)
- Lenses are compatible with the Contax

SAMPLE IMAGE: Arsenal Kiev 4AM (1970s)



Asahi Pentax Auto 110 (1970s)

- Uses 110 film
- Smallest SLR
- 3 Interchangeable lenses



SAMPLE IMAGE: Asahi Pentax Auto 110 (1970s)



Argus C-3 (1930s)



- The “Brick”
- Extremely popular American 135 film camera
- Regarded as indestructible

SAMPLE IMAGE: Argus C-3 (1930s)



- Rangefinder out of alignment, focus not working

SAMPLE IMAGE: Argus C-3 (1930s)



- After rangefinder adjustment (still not quite spot on, got lucky on this shot)

Agfa Isolette II (1950s)



- 120 film
- As acquired

SAMPLE IMAGE: Agfa Isolette (1950s)



- Focus was stiff, bellows were leaky

Agfa Isolette II (1950s)



- After complete Clean / Lubricate / Adjustment (CLA) plus replacement of the bellows

SAMPLE IMAGE: Agfa Isolette (1950s)



- Much more satisfactory results

Yashica 635 (1960s)



- 120 film TLR
- Capable of shooting 135 (35mm) film with an adapter kit

SAMPLE IMAGE: Yashica 635 (1960s)



- Shutter speeds were a bit slow and the lenses hazy, needing repair
- Have had it repaired, awaiting a test

Kodak Instamatic 50 (1963)



The “50” was introduced in the UK in February 1963, and this is an example of my first camera. In March 1963, the same camera was launched in North America as the “105.”

These cameras used a “foolproof” drop-in 126 cartridge and produced 28mm x 28mm negatives.

The Instamatic line and its numerous iterations was the most popular Kodak camera ever.

SAMPLE IMAGE: Kodak Instamatic 50 (1963)



Husky the Muskie, Kenora, Lake of the Woods, Ontario, taken circa 1968

Yashica-D (Grey Edition, 1959)



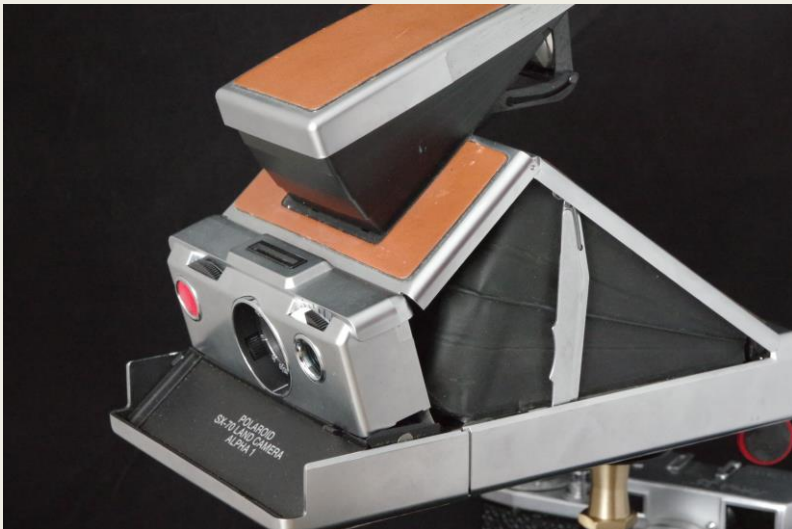
SAMPLE

IMAGE:

Yashica-D
(Grey Edition,
1959), from a
contact sheet
of shot taken
circa 1997)



Polaroid SX-70 (1972-1981)



SAMPLE
IMAGE:
Polaroid SX-
70 (1972-
1981) of
shot taken
in 2023



Olympus Trip 35 (circa 1968)



Ricoh 35 (1955)

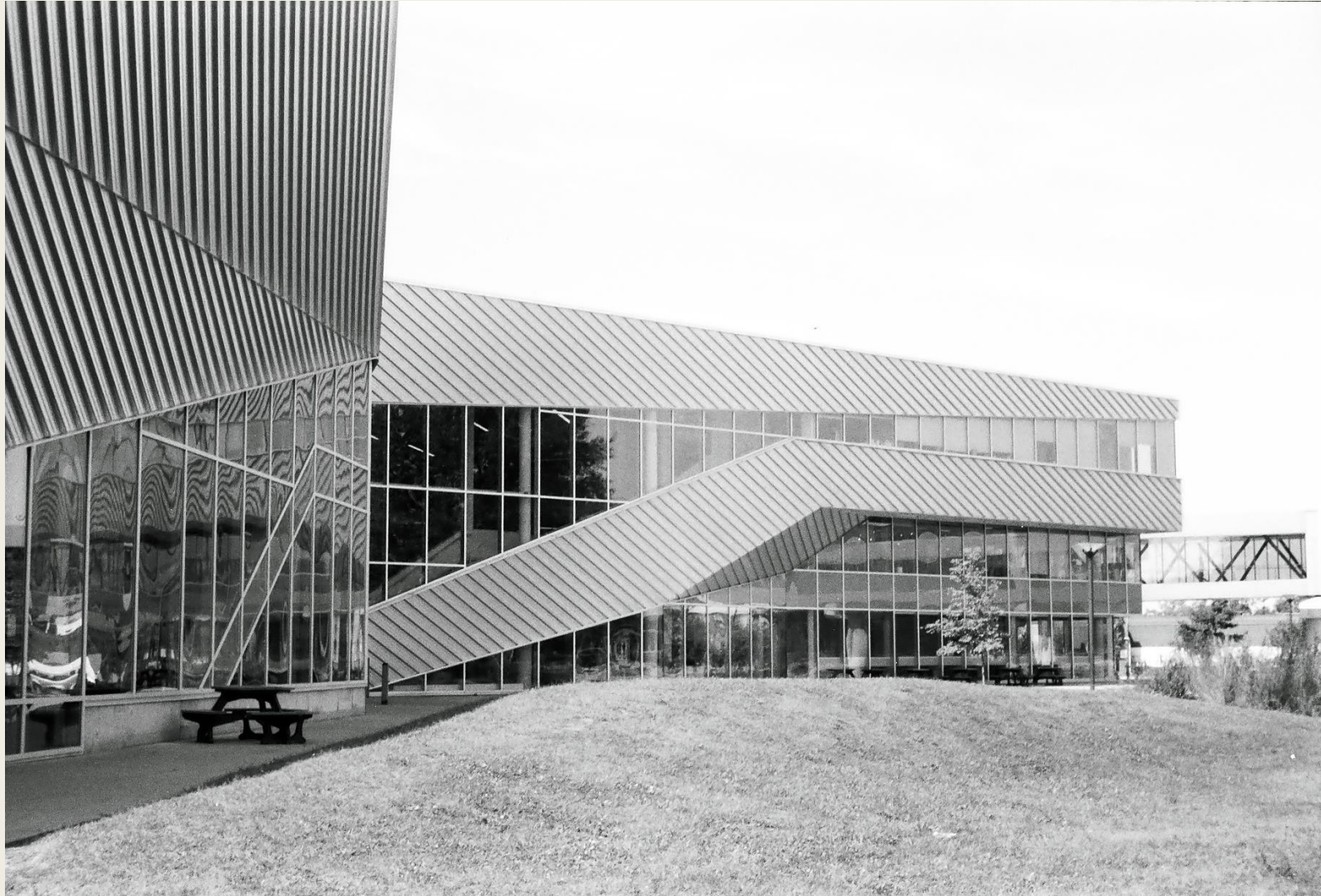


Zeiss Ikon Contessamat SE (1964-1966)



SAMPLE IMAGE (unedited)

: Zeiss Ikon Contessamat SE (1964-1966)



Pentax Spotmatic F (1973)



SAMPLE IMAGE: Pentax Spotmatic F (1973)



Fujica 35-EE (1959)



SAMPLE IMAGE: Fujica 35-EE (1959)



A “selfie” in the sideview mirror of my Dad’s car taken in 1968

Minox 35 EL (1964)



The first version had a red shutter button. Each subsequent version of the Minox 35 can be dated by a different coloured shutter button.



Optina 1A (circa 1956)





Takumar 85-210mm F4.5 (1964)



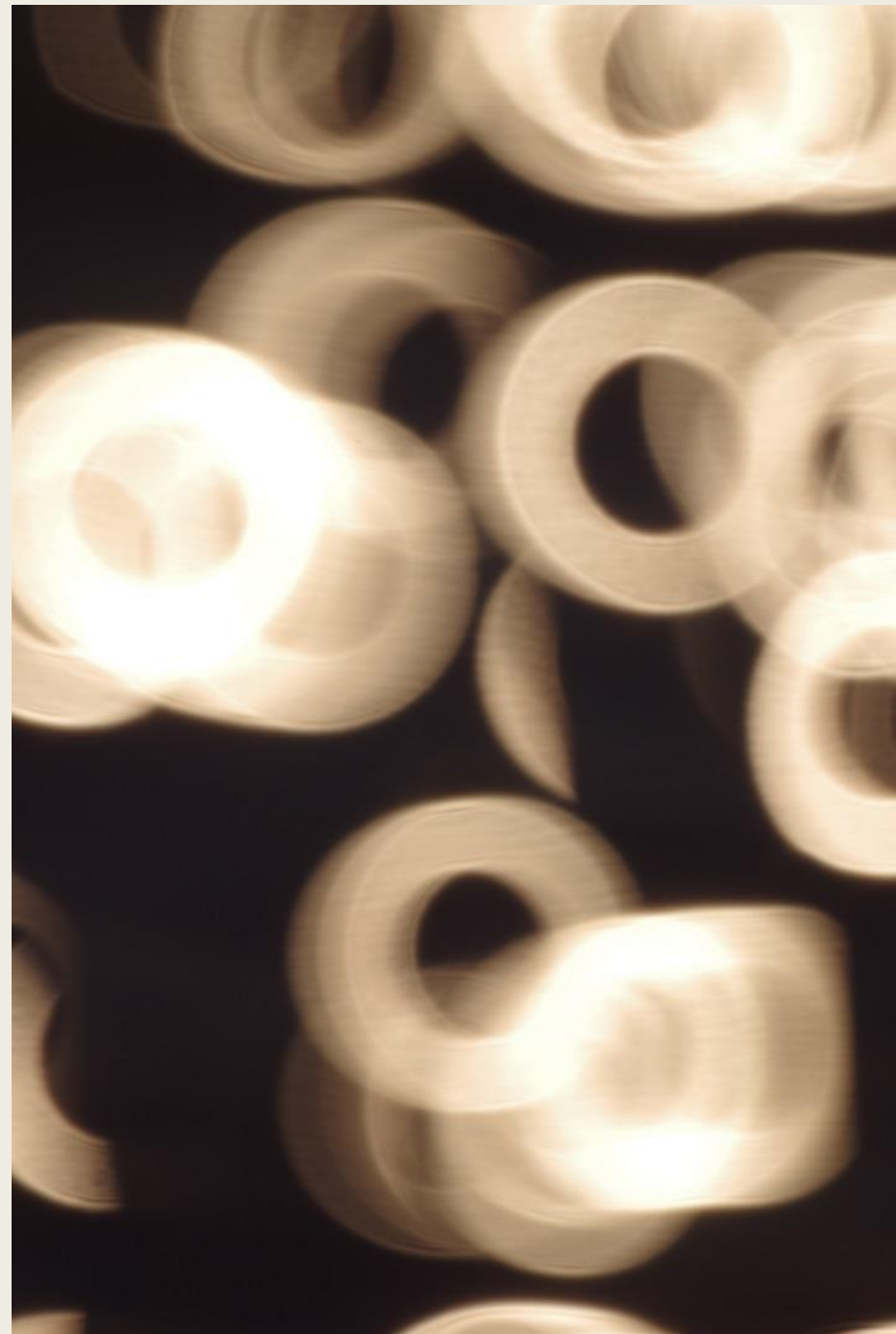
Takumar 50mm F1.4 (circa 1964)



Tokina 500mm F8 (1984)



SAMPLE
IMAGE:
Tokina
500mm F8
(1984) as
used in photo
taken in 2018



FAQ: WHAT DO I DO IF MY CAMERA NEEDS TO BE REPAIRED?

Answer: Diagnose the problem, and if it is repairable, try to do it yourself.
You might need to, or prefer to, send it for repair to a service.

Diagnosing the problem

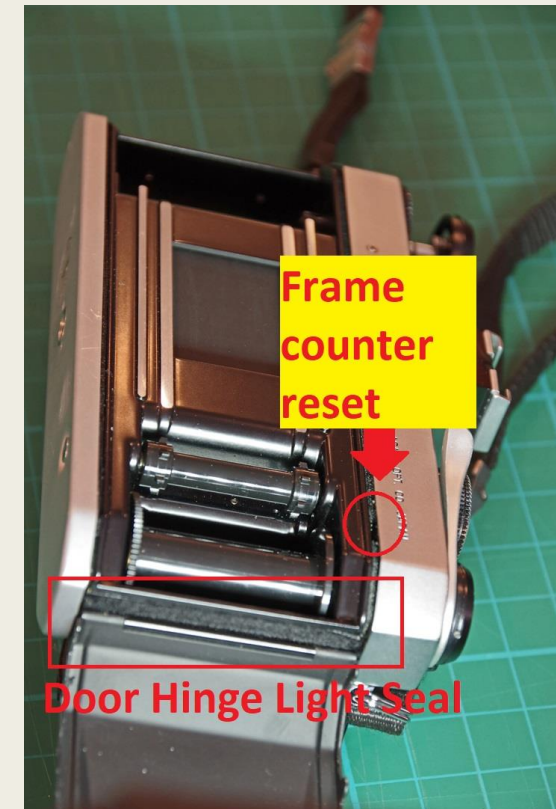
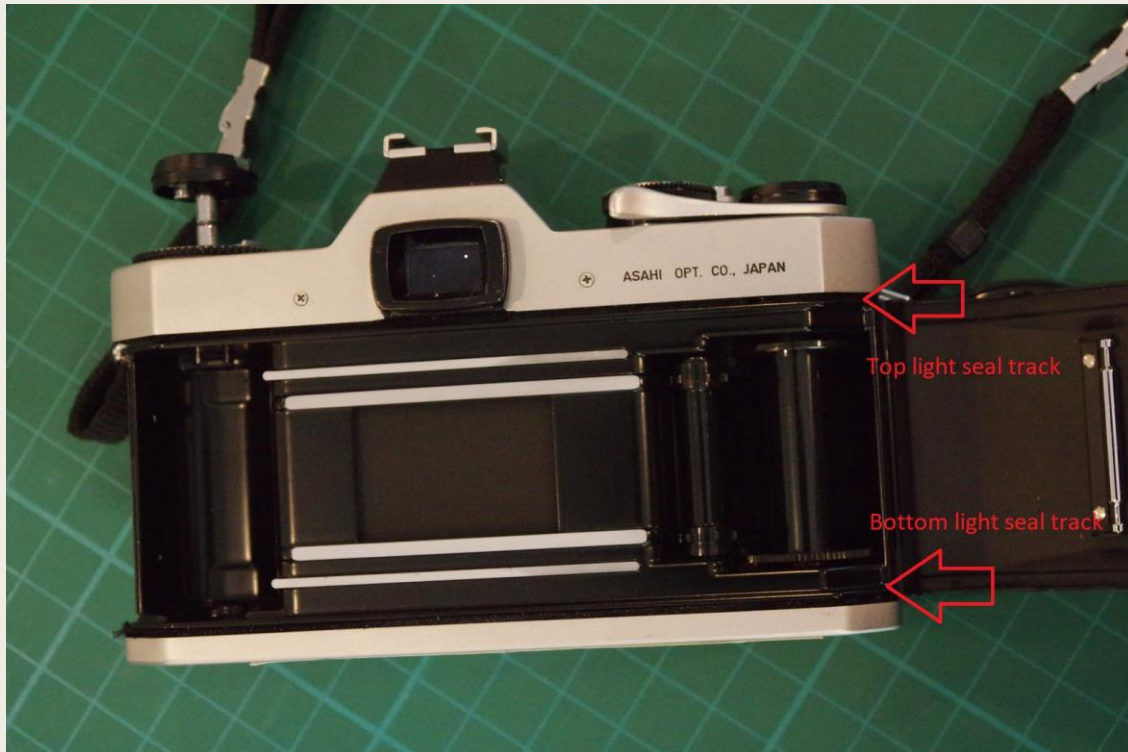
- Does it affect the photographs?
 - *Cosmetic problem (e.g., “reskinning”) or functional problem?*
- Which component?
 - *Lens, body, film advance, focusing mechanism*
- What needs to be done?
 - *Is there a work-around (elastic band, gaffer tape, battery fix)?*
- Can I do the repair myself?

Adjusting rangefinder focusing mechanism

- Do it yourself: Argus C3 example
 - Needed instructions available online
 - In general, there will be a screw that will adjust the position of one of the mirrors in the rangefinder
 - Set the focus of the lens on infinity
 - Check the focus on the film plane using a ground glass (or alternative)
 - Gently adjust the screw
 - Might need repeated attempts
- Professionals have the proper equipment

Basic Camera Repair and Maintenance: Replacing Light Seals

- One of the key issues with older cameras is the deterioration of the open cell foam light seals used the camera back. Poor light seals can produce light leaks on exposures, characterized by flares or bright red streaks on negatives and prints.



Replacing camera light seals

■ Initial Steps:

- ✓ Examine the condition of the camera light seals and determine which light seals require replacement
- ✓ Check out some of the You Tube video links provided at the end of this presentation. Also check to see if there are You Tube videos on replacing the light seals for your specific camera.
- ✓ Use a well-lit workspace
- ✓ Assemble the tools and materials you will need to clean and replace the light seals, including:
 - New light seals (either precut or use adhesive backed foam sheets available at crafts stores)
 - Lint free gloves
 - Ruler and/or measuring tools
 - X-acto knife
 - Tweezers
 - Q-tips
 - Rocket blower
 - Toothpicks or bamboo skewers and/or plastic hobby tools
 - Isopropyl Alcohol (wipes) and/or optional lighter fluid and/or acetone
 - Painter's tape
 - Optional: Purell (to assist with adjusting the positioning of light seals)

Replacing camera light seals



Replacing camera light seals

- Removing old light seals and cleaning the residue:
 - ✓ Remove the lens and use a body cap to try to keep the camera body stay fairly flat.
 - ✓ Cover the shutter carefully using the painter's tape to prevent residue from entering the shutter or lens.
 - ✓ Use the toothpicks and/or hobby tools to remove old deteriorated foam light seals and the hinge seal. Be sure to wear gloves because the residue is sticky and messy.
 - ✓ Use the isopropyl alcohol wipes to clean both the light seal grooves as well as the hinge seal and along the top and bottom of the camera back which often are "gooey". Some camera backs are removable which makes cleaning the hinge seal easier.
 - ✓ Make sure the hinge seal and light seal grooves are clean and dry.

Replacing camera light seals

- ✓ PLEASE NOTE where the film frame counter reset button is located at the back of the camera since this button must NOT be covered by a light seal. With many cameras the film frame counter reset button is found in the top right-hand side light seal track.
- ✓ If using a precut lens seal kit, determine which pieces go where and pre-position them to ensure they are going to go in the appropriate places. If cutting your own light seals, measure carefully and use the X-acto knife to cut appropriate widths and lengths.
- ✓ The next step requires some patience! Remove the adhesive backing and carefully position each light seal using the hobby tools or toothpicks to assist, making sure to leave a “gap” for the film frame counter reset button. Tamp down the light seals. An option is using Purell in the track and on the light seal to allow adjustments to the placing of the light seal. The Purell will eventually dry and set the light seal.
- ✓ Once everything is dry remove the masking tape protecting the shutter and close the back to ensure it closes and sets the light seals.

Replacing camera light seals

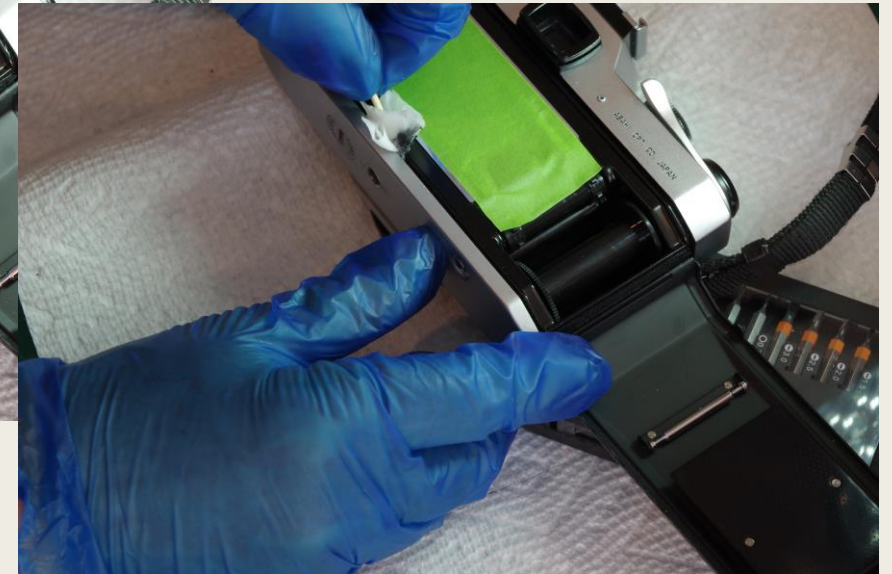
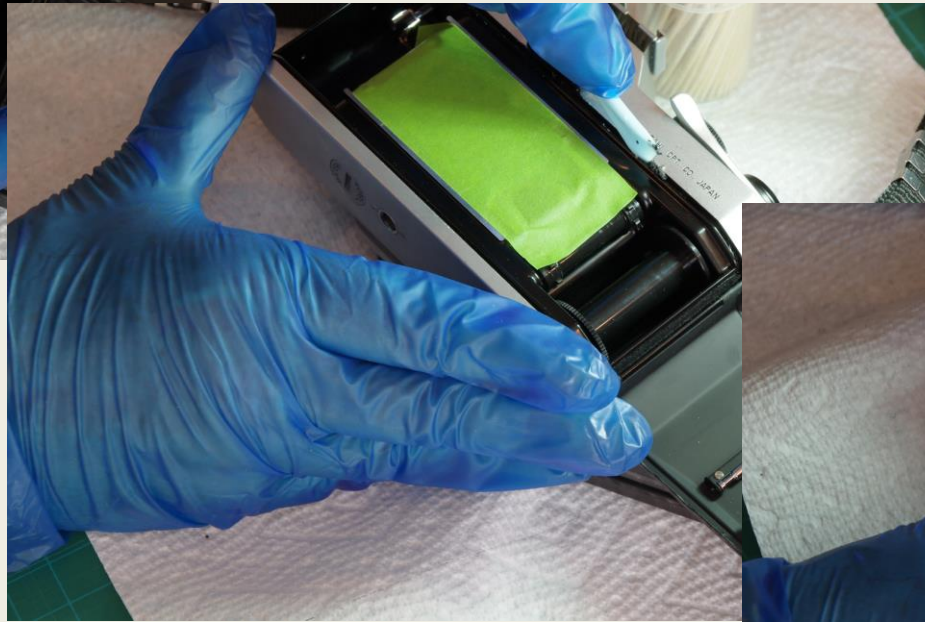
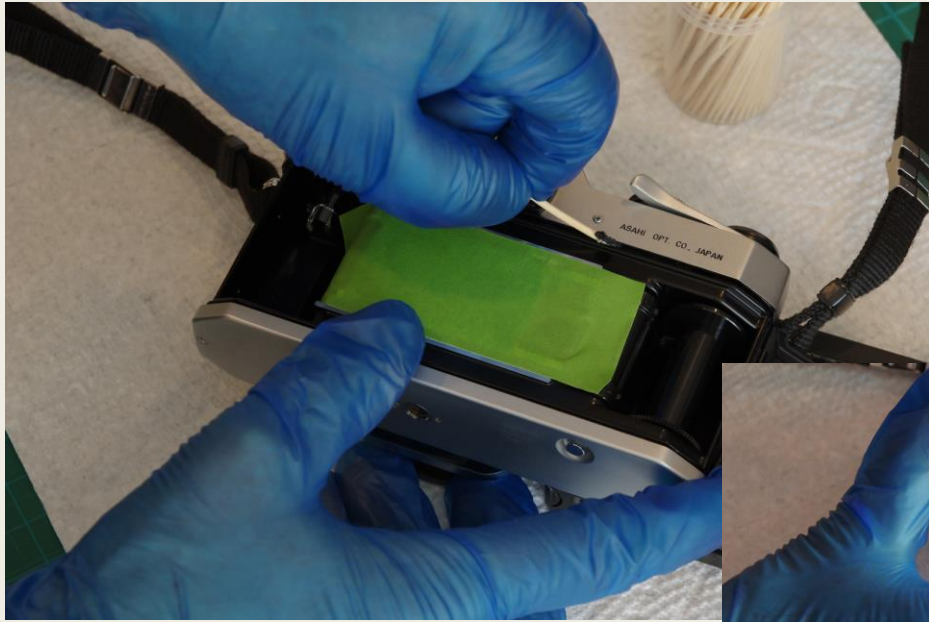
- Protect the shutter

Use masking tape to avoid any debris from falling into the shutter mechanism.

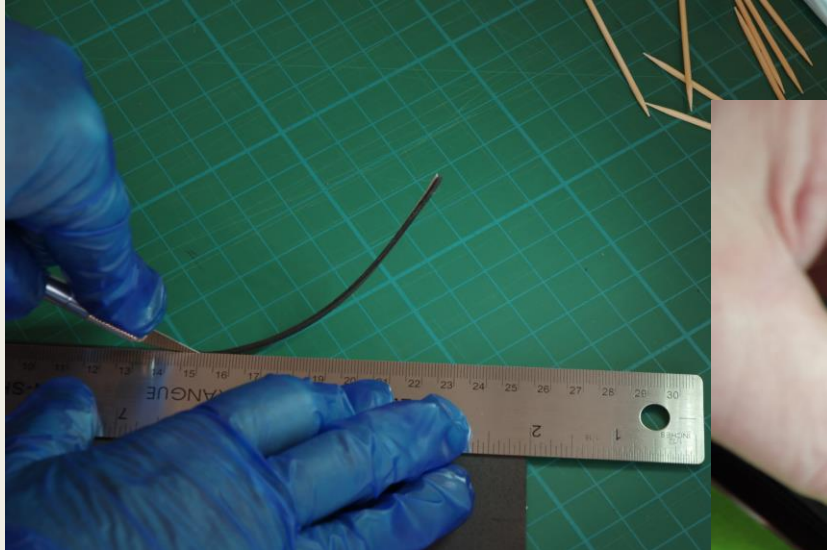
Cut one smaller piece stuck to itself to protect the tape from sticking to the shutter.



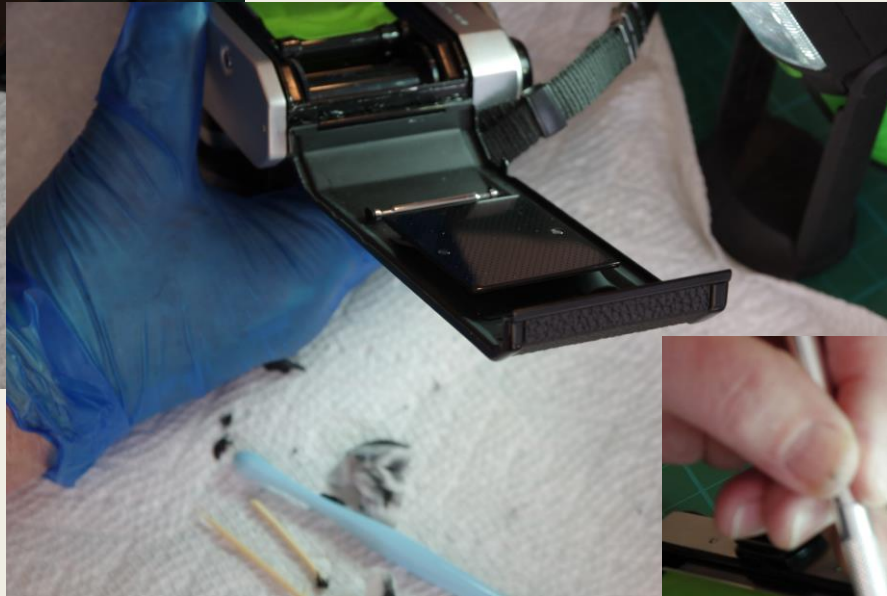
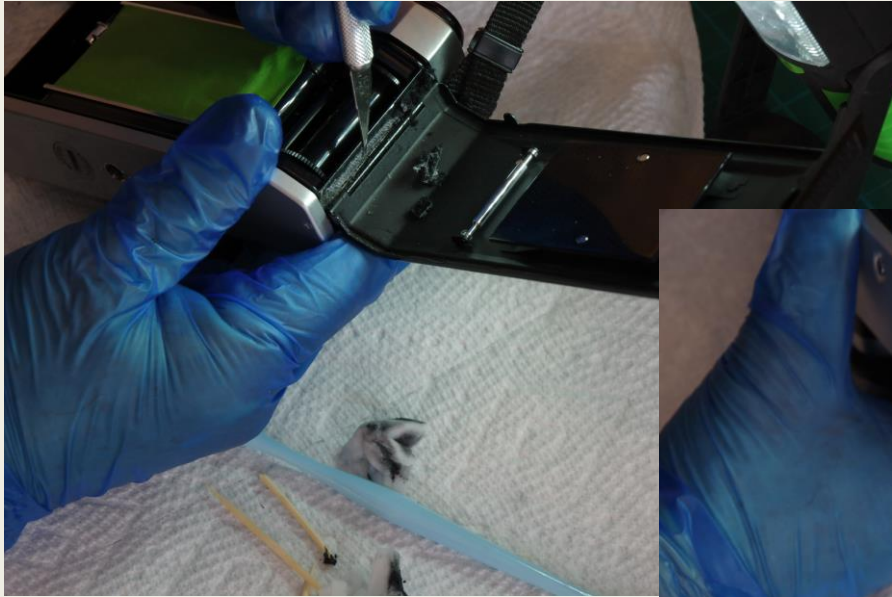
Replacing camera light seals



Replacing camera light seals



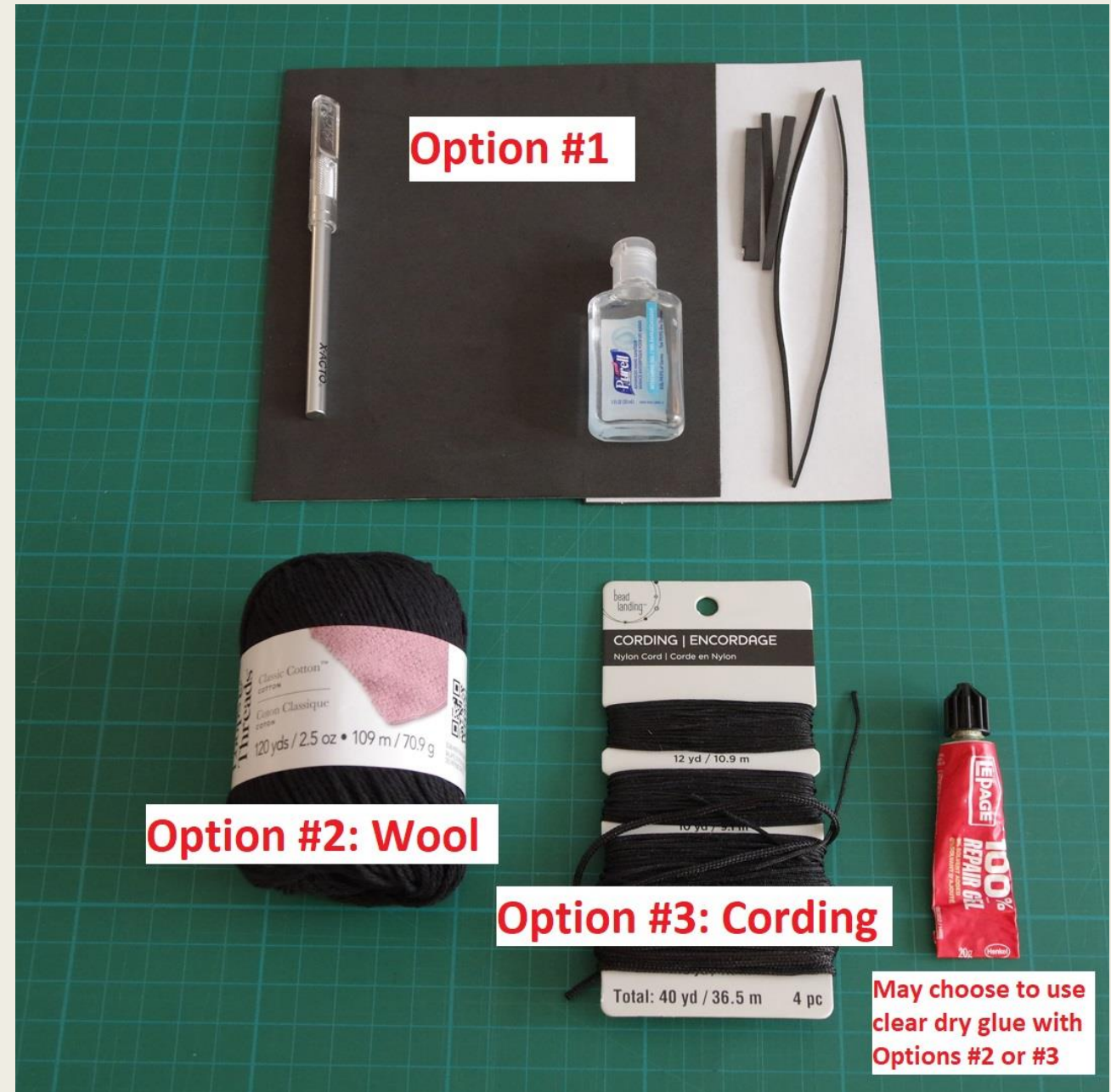
Replacing camera light seals



Replacing camera light seals (optional technique)

- *Optional approach:*
 - ✓ This approach is generally easier and avoids many of the problems associated with using adhesive backed foam. It may not be as reliable in protecting from light leaks.
 - ✓ Use yarn or necklace cord instead of foam to provide light seals. This technique was often used by many German and Russian camera makers after WWII.
 - ✓ If using yarn as your light seals, try to use black, 100% cotton, 4-ply yarn. If the yarn is too thick, remove 1-ply. Many users of this approach do not use any glue; some use transparent glue.

Replacing camera light seals (optional techniques)



Replacing the mirror bumper dampener

- While replacing the light seals, it is a good idea to also check the condition of the mirror bumper. This foam protects the mirror during an exposure and dampens the noise. Because the mirror bumper is made of open cell foam, it deteriorates over time in older cameras.



Replacing the mirror bumper dampener

- Steps to replace the mirror bumper foam:
 - ✓ The first step is to remove and clean the area where the replacement mirror bumper will go.
 - ✓ Hold the camera upside down to clean off the old bumper to protect any residue from getting on the focusing screen. You may wish to use a piece of gauze or soft flexible cloth to assist with protecting the focusing screen.
 - ✓ Most light seal replacement kits include a mirror bumper piece. If cutting your own mirror bumper foam, measure carefully and use the same adhesive foam.
 - ✓ Carefully place the foam in the appropriate spot. Tweezers or the edge of the X-acto knife can help with the correct placement of the foam.
 - ✓ Take a test shot to ensure the mirror operates correctly.

Replacing the mirror bumper dampener



FAQ: HOW DO I GET RID OF DUST AND FUNGUS IN A LENS?

Answer: Use the proper tools, check for You Tube videos on disassembling your lens, be organized, and take your time

Basic Lens Repair and Maintenance

“WHERE DOES THIS PIECE GO?”

Lens repair, including disassembly and reassembly, can be and more difficult and more aggravating than putting together an IKEA product. If you have some patience and pay careful attention to details, the task is not as daunting as it may first appear. There are lots of videos and resources to help guide you through, and while some of the tools are essential, they are not prohibitively expensive.



Basic Lens Repair and Maintenance

■ Initial Steps:

- ✓ Examine the condition of the lens. If the lens appears dirty and/or “cloudy,” determine if there is dust and/or fungus inside the lens.
- ✓ Check out some of the You Tube video links provided at the end of this presentation. Also check to see if there are You Tube videos on disassembling and cleaning your specific lens.
- ✓ Use a well-lit workspace and organizational containers to place lens elements and pieces as you proceed with disassembling the lens.

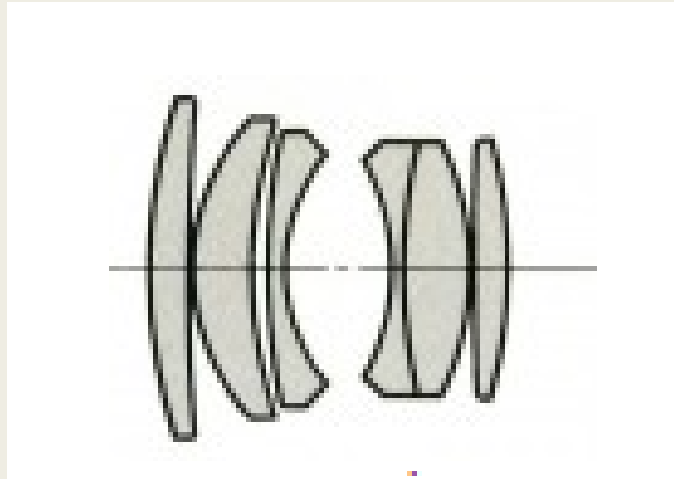
Basic Lens Repair and Maintenance

- Assemble the tools and materials you will need to disassemble, clean and reassemble the lens (approx. \$110), including:
 - Adjustable lens spanner wrench tool (approx. \$21)
 - Lens suction tool (approx. \$8)
 - Vacuum pad set (to loosen name plate retaining ring) (approx. \$24)
 - Tweezers
 - Lens cleaning wipes and microfiber cleaning clothes
 - Nitrile gloves
 - Precision micro screwdriver set
 - Filter wrenches (optional) (approx. \$14 for three)
 - Rocket blower and dust brushes
 - Organization containers (to hold screws and parts)
 - Sharpie marker (optional, not shown in photo)
 - Hydrogen Peroxide, 3% concentration (if needed for fungus)
 - Lens vise repair tool (approx.\$40)

Basic Lens Repair and Maintenance

After you have all the necessary lens tools and materials, and before you begin to disassemble a lens, try previewing a You Tube video to learn some of the techniques for taking apart and reassembling your specific lens. Be sure to use the organizational containers to help with a logical sequence for disassembly and reassembling the lens. Particularly helpful is finding a diagram to the configuration of lenses to assist you. Many camera brands have dedicated user websites with lots of resources.

Diagram of a Pentax K 55mm f2 lens found on Pentax Forums website

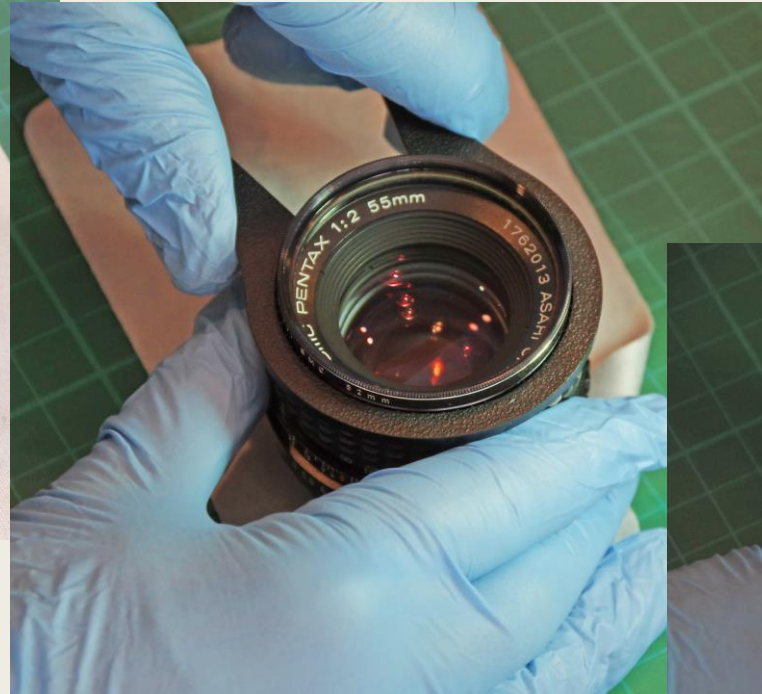


EXAMPLE: SMC Pentax-M 50mm f2 lens disassembly: https://www.youtube.com/watch?v=pjYoDlpw_Jw

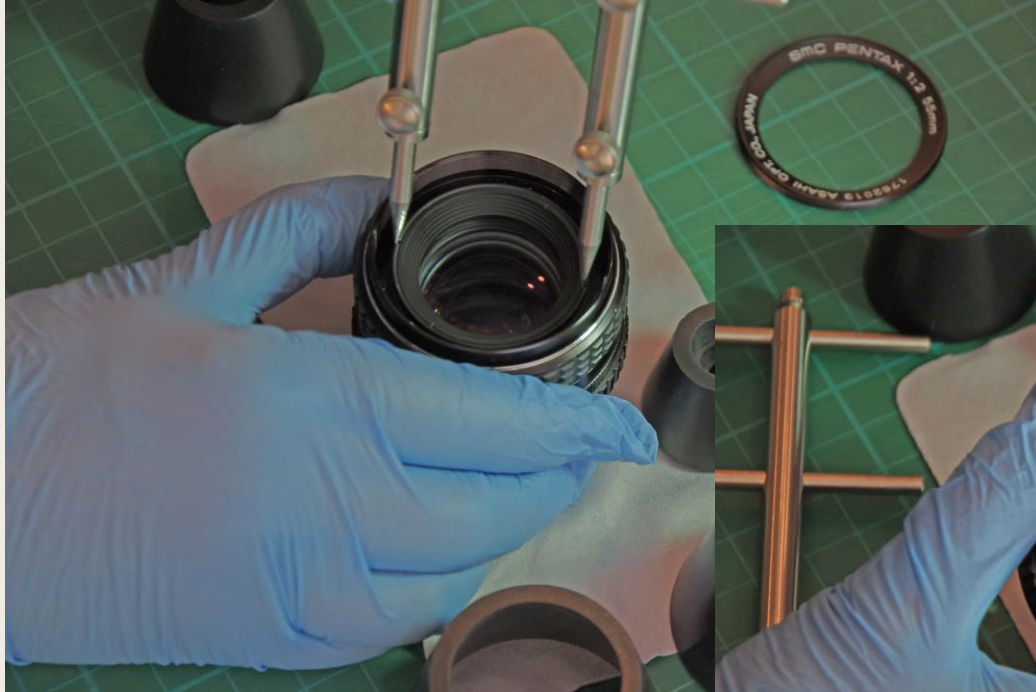
Basic Lens Repair and Maintenance



Basic Lens Repair and Maintenance



Basic Lens Repair and Maintenance

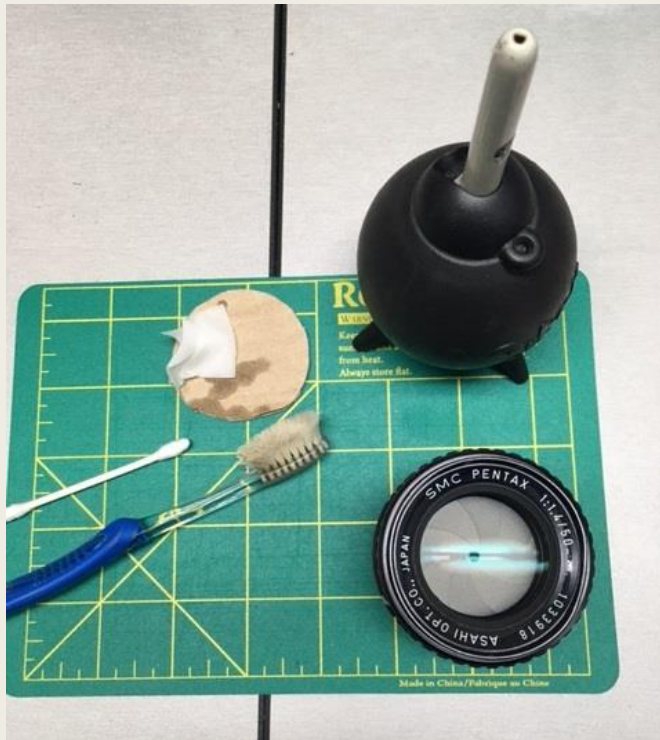


Basic Lens Repair and Maintenance



Basic Lens Repair and Maintenance:

Fixing bent filter threads



Equipment



Bent filter threads: impossible to screw on a lens filter



Basic Lens Repair and Maintenance:

Fixing bent filter threads



Lens vise repair tool: use a cardboard cutout to protect the lens, and very gradually increase tension of the vise while rotating it slowly, making sure not stripping the threads. You may need to apply a small amount of oil (with toothbrush) to assist with rotating the vise.



SUCCESS!
A UV filter now fits on the lens.

FAQ: WHERE CAN I SEND MY CAMERA TO GET IT REPAIRED?

Answer: There are camera repair technicians and businesses in Ottawa,
Canada, and abroad.

Local repair technicians (personal experience)

- Canadian Camera

- *Nikon F as well as some Canon digital equipment*

- Bytown Camera

- *Nikon S rangefinder, Contax II, Kodak Retina IIc, Rolleiflex 622, and a Leica lens*
 - *No longer seems to be in business*

- Marcus Mosley (mosleytechnologies@gmail.com) ***Note Marcus is not accepting new repairs currently in order to focus on his studies.**

- *Voigtlander Vitessa T, Contax 137MA, Fujica 35-EE, Zeiss Ikon Contina, Pentax KM*

Other repair services (personal experience)

- Paramount Camera Service (Saskatoon)
 - *Voigtlander Bessa II, Bronica ETRS*
 - *They also have a consignment service*
- Jurgen Kreckel (USA)
 - *Specialized in folding medium format cameras of the post-war period*
 - *Agfa Isolette II, Zeiss Ikon Nettar, Voigtlander Perkeo II*
- Lens Medic YYC (Calgary)
 - *Yashica 635*

Other repair services

- Mike Eckman has produced a world-wide directory
 - <https://mikeeckman.com/2023/03/camera-repair-worldwide-directory/>
- Lists several services in Canada
 - *Service Camera Pro – Québec, Canada*
 - *Lens Medic YYC – Calgary, Canada*
 - *Marc Carriere – Zone 7 – Montréal, Canada*
 - *Paramount Camera Repair - Saskatoon*
- Lists more than 35 services in USA
- Others in other countries

Repair information

- YouTube is an excellent source
- Online sources of manuals
 - <https://www.butkus.org/chinon/> is an excellent source, just asks for donations
- Discussion groups
 - “Film Camera Repair Directory And Resources” on Facebook provides repair advice, sometimes has repair manuals

FAQ: CAN YOU STILL GET FILM?

Answer: Generally yes, but sometimes no.

Is film available?

- Common types (120, 135) are easily purchased in Ottawa
 - Online sources can provide wider selection and better prices
 - Locally: Vistek, Henry's, Galaxy, Sooter's, Canadian Camera, Walmart, 613FLEA, Camera Trading Company (Perth), Michael Willems Photo (Place d'Orléans), and others
- Less common types (e.g., 620, 127, 110) can be found online
- Do your homework – shipping and handling adds up

135 film

- The essential film for the collector
- Used in nearly all SLRs, many other cameras, general-purpose
- Commercially available in 24 or 36 image lengths
- Negatives or positives (slides)
 - *Slides might have to be processed by mail (Boréal in Montreal)*
 - *Negatives can be done in many locations or at home*
- Wide selection (Kodak, Agfa, Ilford, Fuji, and many more)
- Expired film has a following but is unreliable in my experience
 - *Apparently, that's part of the attraction*

120 film

- Another essential film for the collector
- Used in medium format cameras
 - *Many formats: 6x 4.5, 6, 7, 9, 12, etc. sizes*
- Comes in 72mm lengths
- Negatives in general
 - *Can be done in many locations or at home*
- Wide selection (Kodak, Agfa, Ilford, Fuji, and many more)
- Expired film has a following but is unreliable in my experience
 - *Apparently, that's part of the attraction*

Different types of film (medium and 35mm)

- 135: common 35mm film, found in Ottawa and online
- 120: common medium format film, found in Ottawa and online
- 220: same as 120 except no backing paper, no longer available
- 620: same as 120 but for the spool, found online or make your own
- 127: similar to 120 but 4 cm wide, found online (not common)
- 838: similar to 120 but smaller, found online (rare)
- 110: sub-miniature film in cassettes, found online
- Minox 8x11: found online (not common and expensive)
- 126: Instamatic film, no longer available
- APS camera format: no longer available

220 film

- Once common
- Used in medium format cameras
 - *Many formats: 6x 4.5, 6, 7, 9, 12, etc. sizes*
- Twice as long as 120 film
- No longer available
 - *Which is a dirty shame*

620 film

- Same as 120 except for the spool (Kodak patent)
 - *120 spool can be cut down to 620 size for some cameras*
 - *120 film can be re-spoiled onto a 620 spool at home or commercially*
- Used in Kodak medium format cameras and some others
 - *Many formats: 6x 4.5, 6, 7, 9, 12, etc. sizes*
- Processing is the same as for 120 film

127 film

- Used in “small” medium format cameras
 - *Many formats: 4x 3.5, 4, etc. sizes*
- Available by cutting 120 film down to 127 size
- Can be processed where 120 film is processed

838 film

- Obsolete format, transitional between 120 and 135
 - *Uses a backing paper like 120*
 - *About the same width as 135*
- Available by cutting 120 film down to 828 size
- Can be processed where 120 film is processed

110 film

- Used in some sub-miniature cameras (e.g., Pentax 110)
- Has a bad reputation but is mostly because of poor cameras
- Available only online
- Can be processed commercially in Ottawa

Minox 8x10 film

- Used in Minox “spy” cameras and their clones
- Available only online
- Can be processed from the original vendor
- Expensive!!
- Quality is so-so

126 film and APS film

- Once common
- Used in Instamatic (126) and APS cameras
 - *Some of these were very interesting cameras!*
- Required special machines for processing the film
 - *The machines are no longer available, no remaining labs*
- These films are no longer available

Other film formats

- There are obsolete film formats that are bigger than 120 and are no longer available
 - *Old Kodak formats in particular (e.g., 116 or 616)*
 - *Can sometimes be McGyvered by using adaptors to use smaller 120 film in larger cameras*
- Larger formats are a specialty all their own

FAQ: WHAT DO YOU DO WITH YOUR FILM AFTER YOU HAVE SHOT A ROLL?

Answer: Four things: develop it, digitize it (optional), share the results,
and store the film.

Developing film

- Plenty of commercial options
 - *Sooter's has a lab on Bank at Slater for most types*
 - *Henry's, Vistek, etc.*
 - *Boréalis in Montreal for slide film*
- Can be done at home
 - *Slides are not easy to do but negatives are (apparently) easy*
- Home processing requirements are minimal
 - *Dark bag for putting the film into the tank (dark room not required)*
 - *Developing tank and developing fluids*
 - *Drying area*
 - *Storage for the materials*

Digitizing film (optional)

- Will be done, for a fee, by processing companies
- Can be done at home quite easily
- Film scanners
 - *Dedicated scanners work well but normally limited to 135 film*
 - *RA Photo Club has an excellent scanner to loan*
- Flat-bed scanners
- Macro photography
 - *Need a light source, holder (can be home-made), and macro lens*
 - *Fast but fussy*

Sharing the results

- If the film is digitized, the world is your oyster
- If the film is not digitized, print in a darkroom
 - *Commercially or at home*
- Home requirements to print
 - *Dark room*
 - *Enlarger*
 - *Developing trays and fluids for the prints*
 - *Storage area*
 - *Knowledge, skill, and “persnickiness”*

Storing the film

- Film can be chunked higgledy-piggledy in a drawer
 - *Once common*
 - *This is not very archival*
- Use archival storage sleeves for the film strips
- Maintain a list of “shoots” so you can find negatives later
- Be consistent!

Question:

How many of you have developed film?

Would you be interested in a future presentation/demonstration about how to develop a film?

FAQ: WHERE CAN I GET BATTERIES FOR MY OLD CAMERA?

Answer: Some are available locally, rest online. Your old camera might not need batteries, though.

Does my camera need batteries?

- Purely mechanical cameras: No
- Cameras with exposure meters
 - *Selenium photovoltaic meter only: No (but the meter is probably inaccurate)*
 - *Loop and needle type meters: Probably not if you can set the exposure manually*
 - *Auto-exposure: Yes, if the camera does not have manual controls*
- Auto-focus
 - *Manual focus controls: No but auto-focus will not work*
- Other functions (motor drive, etc.): Yes

What type of batteries do I need?

- Check the battery compartment
- Check the user manual
 - <https://www.butkus.org/chinon/>
- Online sites
 - http://camera-wiki.org/wiki/Main_Page

Some common types of batteries

PX625	1.35v mercury-oxide (now banned)	<ul style="list-style-type: none">• In older cameras often just for the meter, in which case you can do without.• Wein cells are available at a cost.• Some new batteries being made.• Adaptors available to convert LR44 type batteries but voltages don't match
LR44, SR44	1.5v button batteries available in multiple versions (A76, 303, 357)	<ul style="list-style-type: none">• Readily available (e.g., Best Buy)• Some cameras call for a 6v version of this battery which is just 4 of these stacked
Exell S27PX	6v, silver oxide	<ul style="list-style-type: none">• Used in Minox 35EL, Rollei 35s, etc.• Seem to be difficult to get locally• Available online (e.g., B&H Photo)
AA or AAA	Common household batteries	<ul style="list-style-type: none">• Used in motor drives• Point-and-shoot cameras

FAQ: WHERE CAN I FIND MORE INFORMATION?

Answer: There are lots of accessible resources available. You Tube tutorials are especially helpful and cover an extensive array of vintage photo equipment.

Resources

Views on the film camera renaissance

Like vinyl, but for photos: Why film cameras are back in focus

<https://www.cbc.ca/news/canada/calgary/bakx-film-kodak-flic-film-1.6728613#:~:text=%22The%20big%20reason%20why%20people,at%20McBain%20Camera%20in%20Edmonton.&text=%22Much%20like%20people%20enjoy%20cooking,The%20same%20with%20film.>

9 reasons why film photography is coming back (a comprehensive overview)

<https://artbypino.com/blogs/news/9-reasons-film-photography-coming-back>

The Neverending Film Photography “Resurgence” (N.B. this article challenges the “renaissance” view)

<https://pxlnv.com/blog/neverending-film-resurgence/>

Why we are falling in love with film photography (again)

<https://medium.com/oimachi/why-we-are-falling-in-love-with-film-photography-again-fd1b20c920b3>

Young shutterbugs driving the revival of film photography in Halifax

<https://www.cbc.ca/news/canada/nova-scotia/halifax-seeing-an-exponential-interest-in-film-photography-1.6690433>

Resources

Views on the film camera renaissance (cont'd)

Keeping the art of film photography alive, one snap at a time

<https://www.cbc.ca/player/play/video/1.6520498>

Why film photography is popular again – You Tube

<https://www.youtube.com/watch?v=7vgi1vmHUsU>

Hands On: Pentax 17 film camera seizes the analog moment

<https://www.pcmag.com/news/hands-on-pentax-17-film-camera-seizes-the-analog-moment>

Basic Camera Repair: Light Seal Replacement

How to replace light seals in ANY film Camera

<https://www.youtube.com/watch?v=6tCWK3j-zX8>

How to replace light seals on a vintage film camera (complete tutorial)

<https://www.youtube.com/watch?v=Vsb4rkC4vOA>

Resources

Basic Camera Repair: Light Seal Replacement

Replacing light seals on a film camera

<https://www.youtube.com/watch?v=zoD8icA9Cvo>

How to replace vintage camera light seals

https://www.youtube.com/watch?v=bq0lukDo_vE

How to replace the light seals in a film camera

<https://www.youtube.com/watch?v=6jvQP-IZIC8>

Fast, quick, and permanent camera light seal replacement using cotton yarn

<https://www.youtube.com/watch?v=Tfk0Si1Bvq8>

Changing the light seals on your SLR

<https://www.youtube.com/watch?v=AfVbvKJdpu8>

Nikon FE light seal replacement

https://www.youtube.com/watch?v=Z_ugDVxr9vk

Resources

Basic Lens Cleaning and Maintenance

What are the best repair tools for vintage lenses

<https://www.youtube.com/watch?v=vmeKfrnaeqc>

Lens repair tools

https://www.youtube.com/watch?v=_r84rsa9_ul

Cleaning FUNGUS from Vintage Lenses: Tools and Method

<https://www.youtube.com/watch?v=czoisKjBCXY>

Fungus in camera and lenses. What it is and how to avoid

<https://www.youtube.com/watch?v=SVSx7f280YU>

Identification and cleaning of lens fungus

<https://www.youtube.com/watch?v=e7v9bQVEU3Q>