

A complete guide to the Mamiya RZ67, part four: maintenance and miscellaneous accessories

Over the past three weeks, I have introduced you to the Mamiya RZ67 Professional camera, its series of film holders and the extensive lens system. In this, part four of the series, I will introduce you to the main system accessories and some basic maintenance/troubleshooting concepts.

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The neck strap

After purchasing my RZ, the first thing I realized would be a big problem was hand holding it for long periods of time. Because of its dimensions, weight, and shape, the grip the camera affords the hands can be tenuous. At the moment I knew I would be using the camera extensively outdoors, I knew I would be on the lookout for somewhere to lay the camera after a while and finding a flat, stable surface is not easy outdoors in the countryside or on city streets!

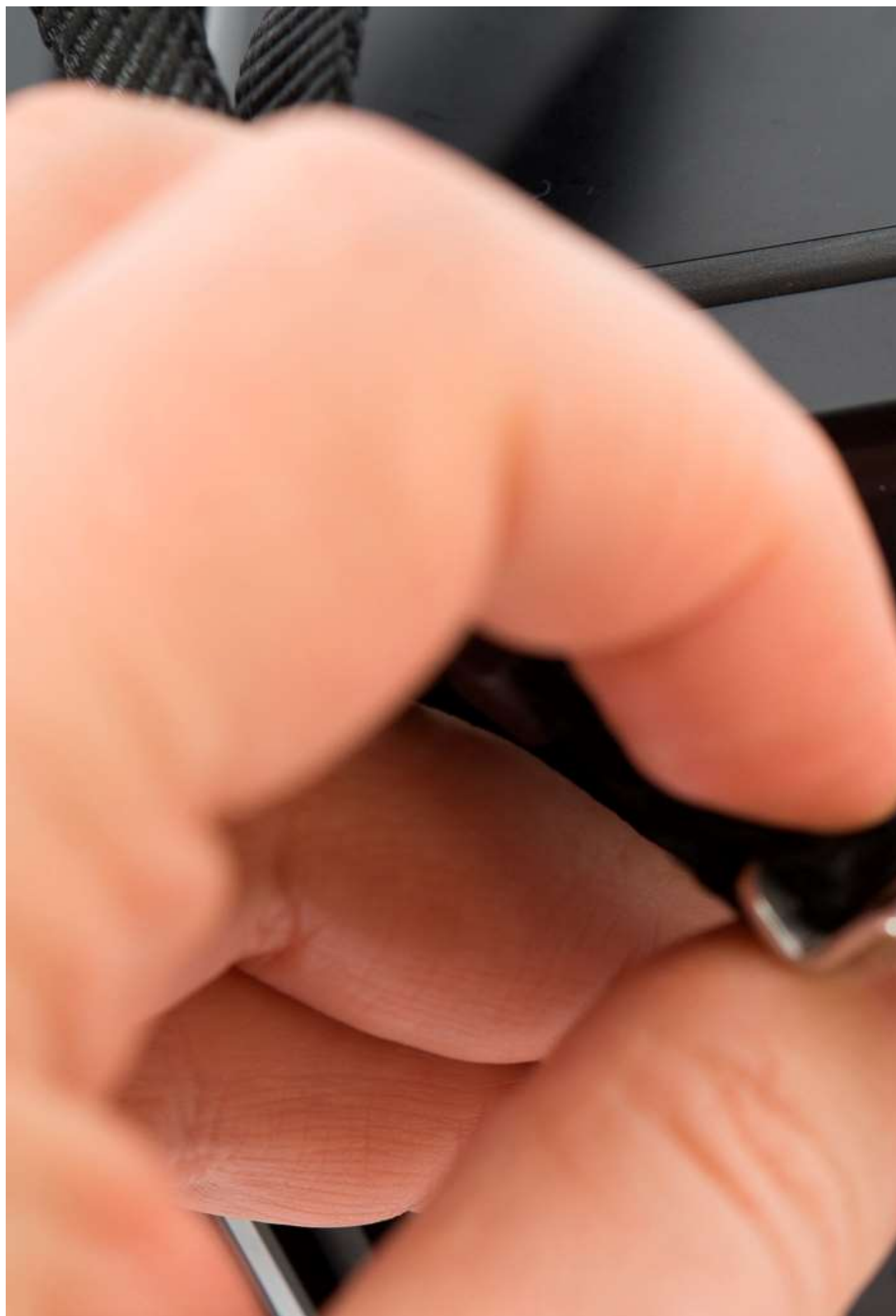
So, I searched a security system to avoid letting the RZ fall to the ground, or in case the camera escaped from me.



Logically, I looked for an original Mamiya RZ67 neck strap. The one I found at that time was in California, around San Francisco, and I remember it was a bit expensive. But it was a brand new one, in the original Mamiya box. You can find some for a less price in the second-hand market, like eBay, and in my opinion, it's a necessary accessory.

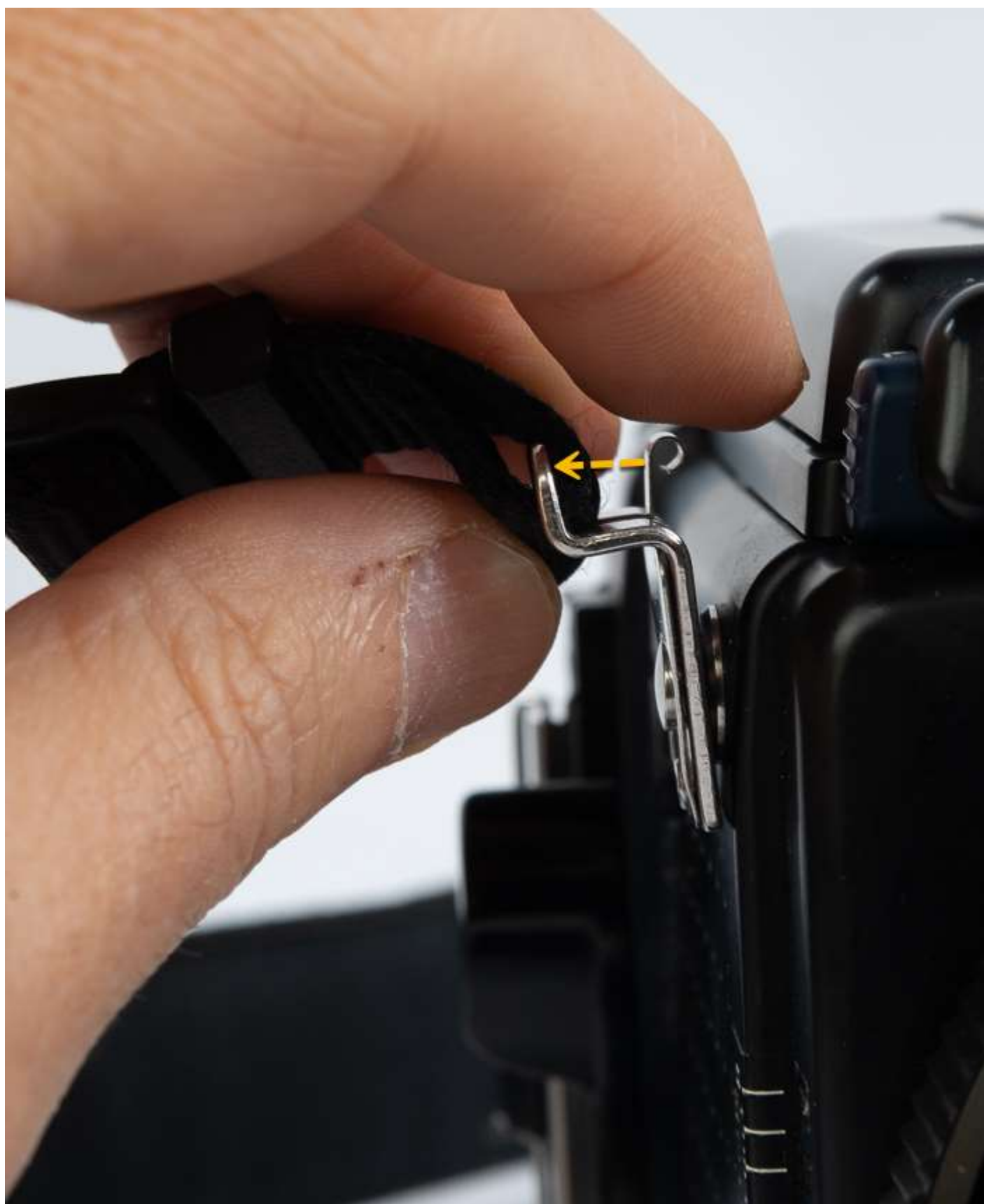
For me, it's also security, even when I shoot in a studio. When I have to move the camera. For example: Remove it from the tripod.

To install the strap:





To remove it:





Pull out the thin metal part as shown in the picture and pull the clip assembly downwards.

Mamiya remote control set RS 401 IR

The RZ67 has a wireless infrared remote control system with a working distance of 30m. If you add a winder and a prism – like the FE701 – you have a quite complete automatic system. All that is missing is autofocus! Bear in mind to check focus and check it every so often before shooting when using the remote.





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You can lock the plug on the camera: it's the "L" position.

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PRO II

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ON

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You have three different channels (frequencies) available. Be mindful to always set the same channel on both the remote and receiver. The transmitter needs 2x R6/AAA batteries, and the receiver needs a 1x 9V0006P (or HN22, NR22, 6LR61...) battery.

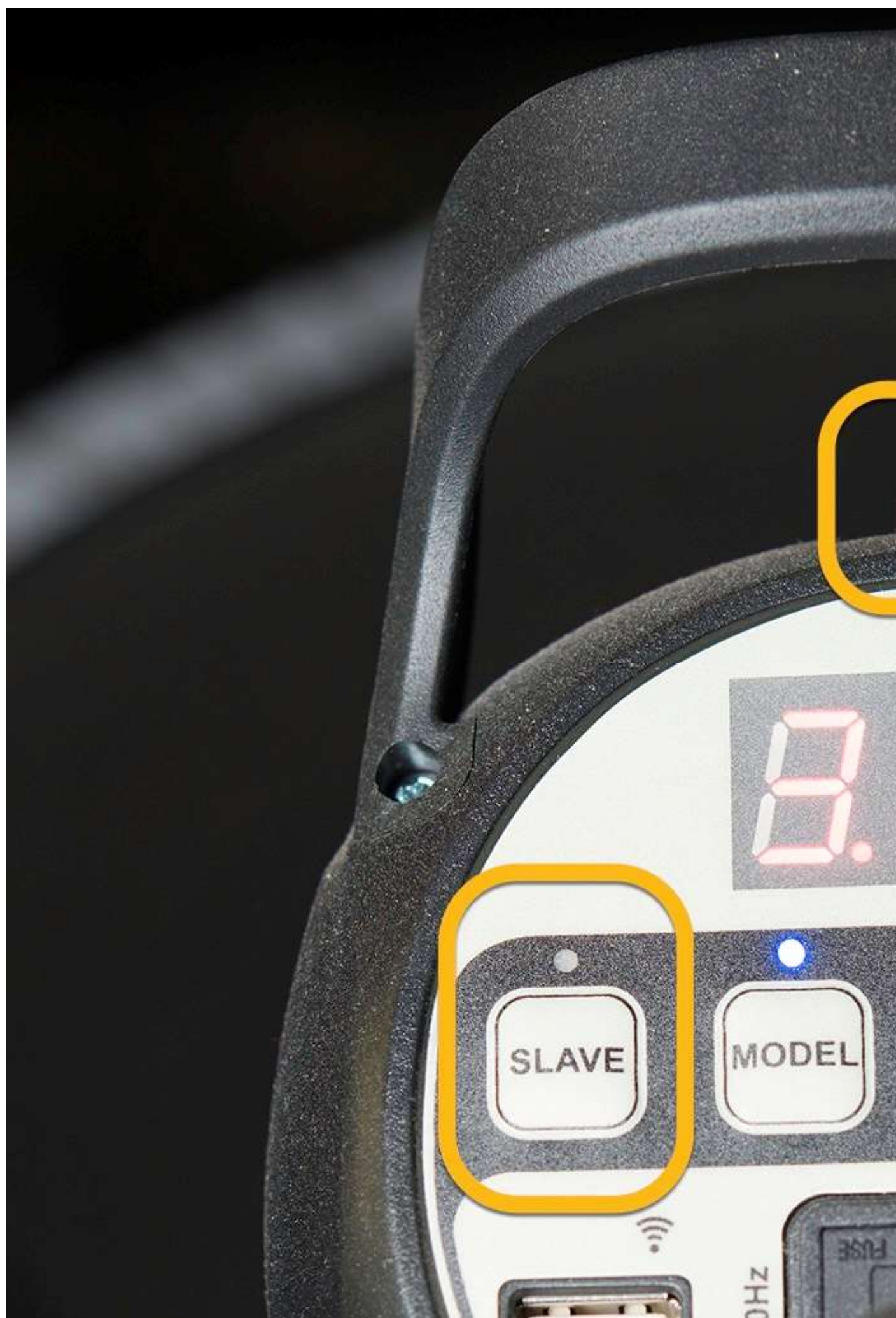
Mamiya manufactured an identical remote control system for the Mamiya 645 AF, but the plug from the receiver that goes on the camera is different (round on the Mamiya 645 AF, rectangular on the RZ). The 645 AF version is not compatible with the RZ. In case of purchase: take care! Many sellers confuse the two.

A flash emits light in different wavelengths, some of which are close to infrared and can disturb the Mamiya RS401 IR remote control.

My experience in the studio with this remote control is that you should know that a flash can trigger a shutter fire without pressing the transmitter or the release button on the camera. This happens to me when I stop my flashes: each time a flash occurs to empty its capacitors just before turning off: it flashes. If I forget to turn the camera off with an unfinished roll loaded, an image will be taken. So remember to stop your camera (or the receiver on the camera) before stopping your flashes from avoiding this problem. When you use the remote control during a studio session, this problem does not occur because the remote fires the camera first, which triggers the flash.

Another problem is that the RS 401 transmitter can also trigger the flashes! This happens only if you use the “eye slave” function of a flash: the main flash triggers all others only by the light emitted, without any cables. In this case, the remote control triggers all the flashes, and they don’t have enough time to charge again before the real shot made by the camera, a few microseconds later. So, many flashes don’t trigger at the right time, and your images might be a lot darker than expected and produce inconsistent results.





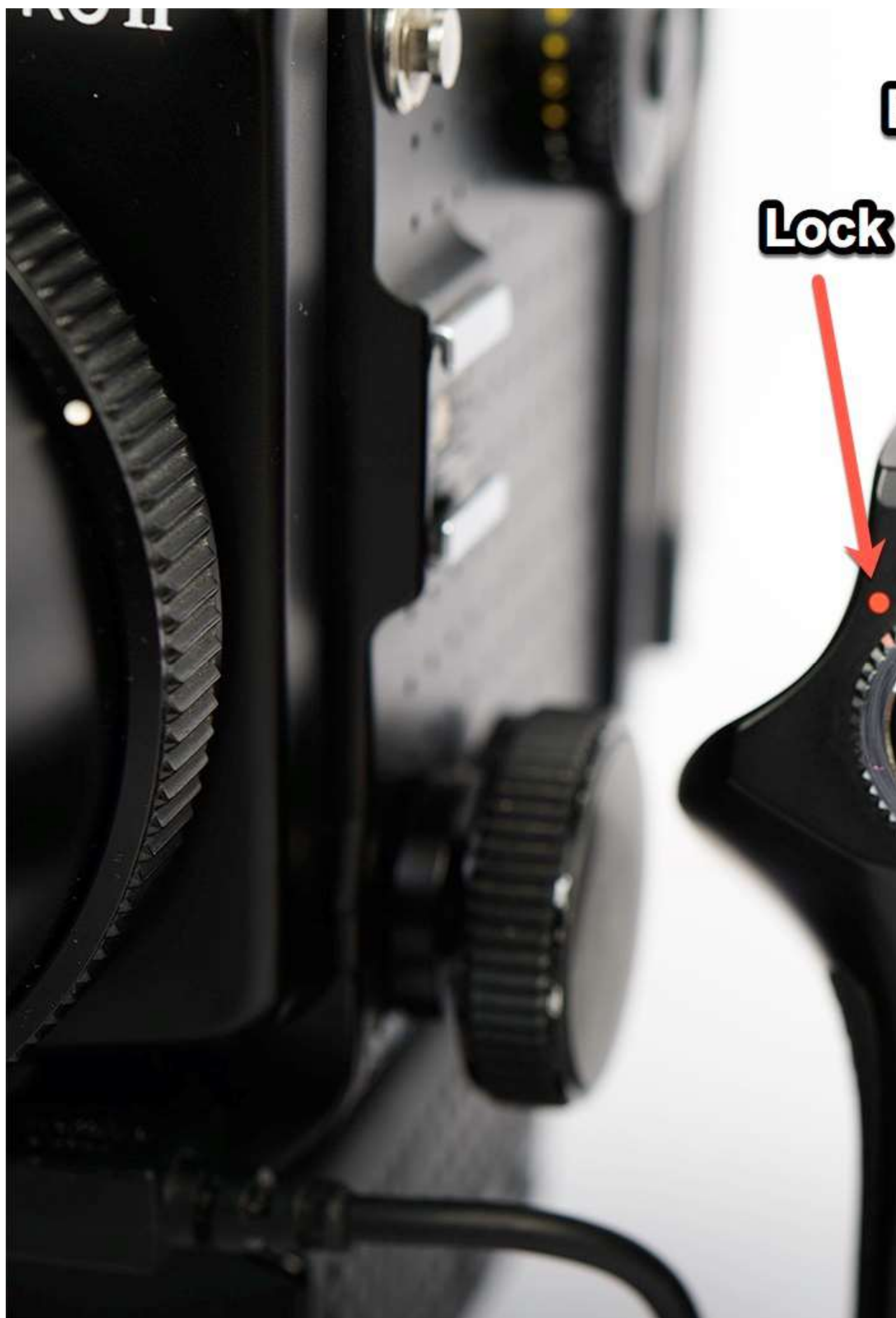
Turn off these functions on all your flashes and instead use cables or a radio transmitter system. I had a lot of problems with that, so I purchased a radio system. You can find some very helpful at a low price using the internet.

Note: The Godox XPro system works perfectly well with the RZ (obviously without TTL possibilities) if you use Godox flashes (I work with the SK400 V2 now). I purchased the N version of the Xpro because I also work with a Nikon DSLR in my studio (mainly to make tests).

L-Grip Holder RZ

Another system to help to shoot using your hands is the Grip. Mamiya made many versions, the only one I have is the L-Grip Holder RZ. I bought it right after the RZ because I thought it would be useful. But this accessory has a small problem: the handgrip with the release button is on the left side of the camera, I am right-handed, and when I want to work with it, I need time to get used again to its manipulation.





This handgrip is convenient for shooting handheld, provided you get used to triggering the shutter with your left hand, but unlike the photos presented here, forget about using the winder at the same time (because of the weight!).

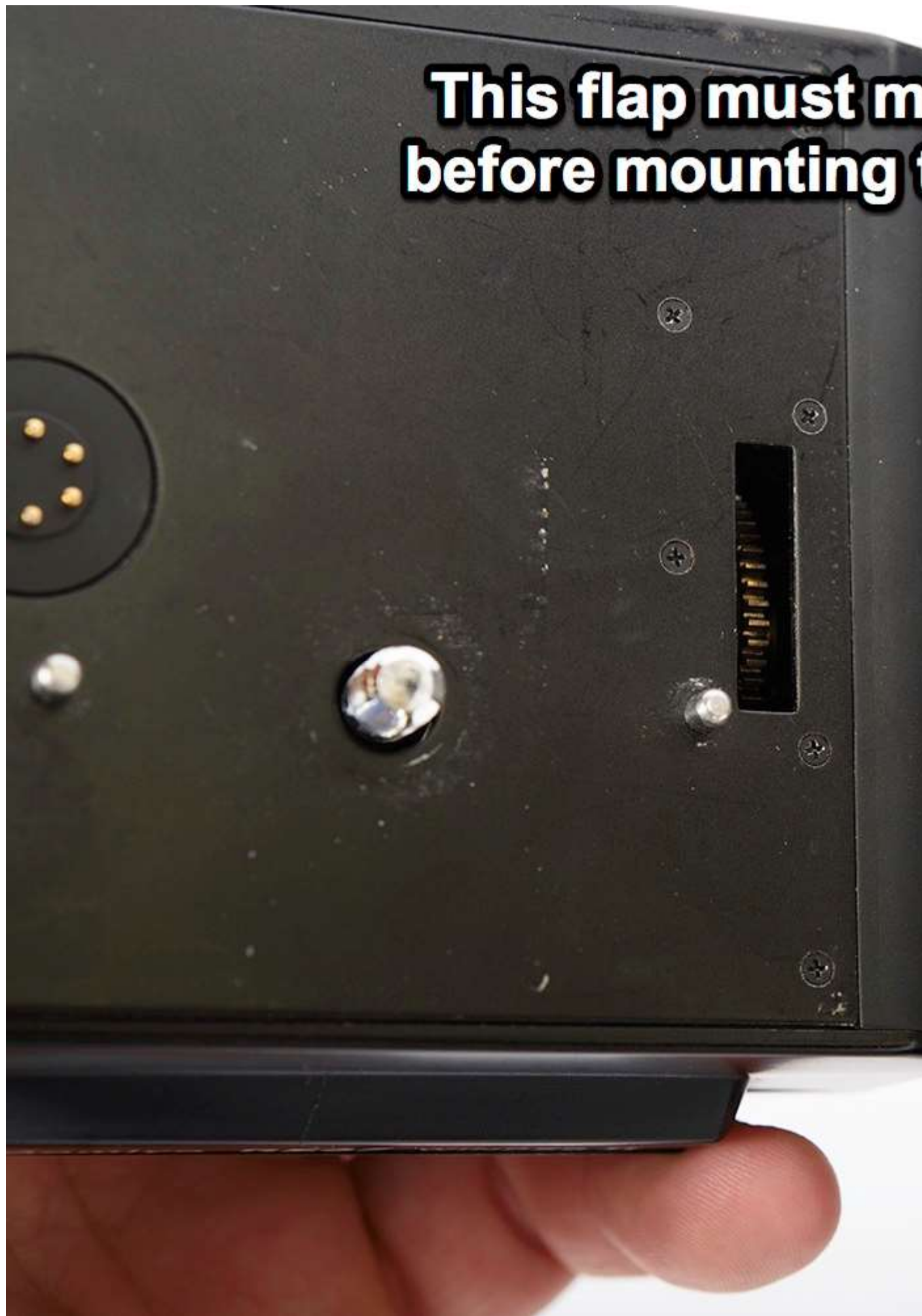
Mamiya manufactured other types of grips: a mechanical grip holder, quite the same I have, but without any wires connecting to the camera, just mechanical transmission to the release button of the RZ. they also produced a pistol grip and a multi-angle grip, most were made for the RB system but work with the RZ.

You will not be able to mount the L-grip holder on the right side because the cable is too short and it will be very complicated to cock the shutter in that configuration.

Mamiya Winder RZ

The Mamiya Winder RZ and Mamiya Winder II RZ are electric motor winders that automatically advance film, recock the shutter and reset the mirror. The winders can make single or continuous exposures at an average speed of 1.5 FPS. The winders mount on the bottom of the RZ, and use 6x R6/AAA batteries. On longevity, official Mamiya documentation states 50 rolls with alkaline batteries and 30 rolls with Ni-Cd. I always remove the batteries when the winder is not in use to avoid leaks problems from the batteries.

**This flap must m
before mounting t**



Before mounting the winder on the bottom of the camera, first open the flap on the bottom of the camera, as shown in the image above.

After mounting the winder and with a fresh roll of film in the holder, pressing the start button on the back of the winder will advance the film automatically to the first frame. After each shot, the winder moves the film forward to the next shot automatically.



At the end of the roll, the winder wraps the roll completely and the film is ready to be changed.

Of the two winder models, the basic Winder was made for the original RZ67 Pro (I) and the Winder II for the RZ Pro II and the Pro D. According to Mamiya, it's not possible to use an original Winder (I) made for the RZ pro version I on an RZ Pro II or IID.

Installing the winder on the bottom of the camera is easy, but add a lot of weight, and it's not very practical if you shoot handheld. I only use the winder when I shoot portraits during studio sessions. My RZ system is then screwed on a stable tripod, and the weight is no longer a problem.

For shooting handheld (without a tripod), the cocking lever is enough to advance the film and to prepare the camera for the next shot. I have to say too that the winder is a bit noisy.



**Buttons for testing the
batteries level**

A close-up photograph of a black electronic device, likely a handheld scanner or similar tool. The device features a large, rectangular battery compartment on the lower half, which is covered by a black plastic plate with a grid of small circular indentations. Above this compartment, there is a row of small, circular buttons. A yellow arrow points to these buttons from the right. A teal arrow points to the battery compartment plate from the bottom left. Another teal arrow points to a small, white, triangular unlock lever on the right side of the battery compartment from the bottom right. The background is a plain, light-colored surface.

**Batteries
compartment**

**Unlock to acc
batteries comp**

Be careful about the placement of each battery, as indicated in the bottom of the compartment (each side). Contact springs mislead, they are not logical.



You can also use an external power supply (DC 9V) to power the winder. It's not complicated to find a DC 9V power supply, with a lot of plugs with one of which corresponds to that of the winder. I use one originally made for a laptop.

Soft pouches

Mamiya sold a lot of pouches for its equipment. You have seen the pouch for the prism in this review, but you also can find a pouch for the backs (Note: it's not easy to find):



For me, it's convenient if I use it for the 645 back: I can store the mask with the back. My 645 mask is already protected by another thin pouch that slips in front of the back in this pouch.

And another one for the winder:



Mamiya also made other different pouches for the RZ system, depends on the lens used:



Soft P
Great tra
from scu
extra me
For RZ cam
For lenses:
For 360 le

This comes from the 1999 MAC (Mamiya America Corporation) accessories catalog.

Maintaining your Mamiya RZ67

To avoid problems, take care of your equipment. Never shock the camera or the lenses. Move them with care. Periodically clean the electrical contacts. Never touch in any way the mirror. If you use an air duster to remove dust on it, move it away, never use it close. Never force when installing an accessory. If it's stuck, it's because there is a problem. Try to resolve it before. Periodically & often, clean your lens and overall equipment. Moreover, store it away from moisture, dust and also chocks. And read the instruction manuals!

You can find much of the original Mamiya documentation by searching on the Internet. If you don't find what you need, please let me know in the comments section below. I have many Mamiya RZ67 user manuals for the equipment I have (and described in this series).

To get you started, here some interesting links:

<http://www.mamiyaleaf.com/documentation.html>

<https://www.butkus.org/chinon/mamiya.htm>

<http://ianbfoto.com/downloads.php>

Problems and troubleshooting

If you encounter any problems, first and foremost: read the user manuals. It's obvious, but it's of utmost importance. This review is only a starting point for help...

In the case of many RZ67 problems, one of the first things to do is to check your battery. The camera has a system to tell you when the battery is low: you can see a red light flashing in the viewfinder, and a beep should be heard (not every time on mine).

Another thing to do regularly is to clean the electrical contacts on the camera. Use a cotton swab very gently and slightly moistened with a little 90° alcohol, taking care not to spread it elsewhere. This can resolve a lot of problems.

Note: Never try to clean the mirror this way! And never touch it with anything.

Most of the time, the RZ67 refuses to shoot after changing or installing an accessory, be it a lens, a film holder, viewfinder accessory, winder, remote control, film... or even after rotating the film back.

Always bear in mind to check these very common oversights after every change:

- The RM lever should be in the central position.
- The dark slide should be removed from the front side of the film holder.
- The release button on the camera should be on the "shoot" position.
- The camera should be cocked.
- The counter view of the back shows at least "1" or a number between 1 and 10.
- A film is loaded in the film back and it's not finished.

Some specific troubleshooting:

The camera refuses to fire

Check your battery. Sometimes, you can forget to put the collar around the release button on the camera to the "lock" position, and after storing the camera in your photo bag, the release button may be slightly depressed, which will empty your battery very quickly (also, the shutter may be fired).

At the beginning of a shoot, the battery could be OK for a few shots and then suddenly, the camera stops working without logical reasons.

Check the battery and change it! Never use low-quality batteries. Prefer silver versions of a known brand. And "fresh" batteries you have purchased recently. Beware of batteries that you have owned (and stored) for a long time. If you can, test them with a voltmeter.

You might be interested in...



A complete guide to the Mamiya RZ67, part three: lenses, filters and accessories



A complete guide to the Mamiya RZ67, part five: conclusion and personal stories

Another possibility is that your camera is not cocked. In this case, you can see the orange led light in the viewfinder. You only have to cock your camera to resolve the problem.

It's also possible that you have forgotten to remove the dark slide: you can see a red led light in the viewfinder in this case. Remove the dark slide to resolve the problem.

With some old backs or older cameras, it's sometimes still possible to shoot with the darkslide installed in its "safe" position. In this case, the function of the camera (which does not normally allow you to take a picture when the dark slide is in the wrong place) is defective. You could accidentally shoot an entire roll of unexposed film if you do not notice the red LED that lights the viewfinder.

I have a film holder that has this problem and sometimes I don't pay attention to the lights in the viewfinder. So I take a series of unexposed images until I see the problem and remove the dark slide. The only way for this is to send the film holder (or the camera) for repair. Most of the time, the issue comes from the film holder and if you have another, try it to find out from which side the problem arises. If it's the holder, it might be better to buy another than to send the defective one for repair.

It's also entirely possible that you loaded a new film but did not cock the RZ until the counter view of the back shows a "1". In this case, the orange LED light will be shown in the viewfinder.

You may verify with a film inside if it is properly loaded: turn the big knob above the film holder. If it's loose, the film inside is not installed correctly, or it may be torn. The empty reel rotates but the film is not driven. So go back to a dark room to check the film and install it correctly. After this check, remember to cock the camera until you see the number one the counter.

The viewfinder shows you interesting information in case of problems. Get used to taking a look to see if a led is lighting in it.

In summary, if you can't shoot with the RZ, try this checklist:

- Cock the camera: the cocking lever must be pushed all the way.

- A lens and a back are installed (and properly installed) on the camera. In case of doubt, remove and install them again.
- You have a film inside the back, and the counter shows you a number between 1-10 (with 120 film). If not, install a film in the back and cock the camera until you see the number one in the counter (the cocking lever has to lock).
- The collar around the release button is in the “shoot” position
- The RM lever is in its central position. If not, push the cocking lever a little.
- Check you are using an RZ lens, not an RB lens.
- If using an RZ lens, verify that the camera speed dial is not on “RBL”
- If using an RB lens, put the speed dial on the camera on “RBL”, (no RBL position on the Pro I, the red dot is when using a prism) and set speed and aperture on the lens.
- The mirror plug for a release cable on the lens is not protruding and displaying a red collar without a release cable screwed on it. Screw the cable in again and slowly unscrew it until the red circle goes back “inside” the lens until you don’t see it anymore.
- The T/N lever on the lens must be on “N” (you can see the green “N”). If not, you will see a white “T” instead, so push the silver lock, and the button back to its normal position, to see a green “N”. After, cock the camera.
- The camera speed dial is on AEF (red dot in the Pro I) without using the prism FE701. Change the setting for a manual speed.
- You are using an RB lens and the prism FE701 is installed but the camera speed dial is on AEF. You can use the prism FE701 with an RB lens as only a viewfinder (without AE possibilities). You need to put the camera speed dial on “RBL” first (pro II & D).
- If you use the winder, the ON/OFF must be on “ON” and you should push the START button after installing a film on the back.
- If you use the remote control RS 401, check the position of each battery, push ON on both transmitter/receiver and make sure they are set to the same channel.
- Press the release button lightly and, at the same time, take a look inside the viewfinder. Do you see some LED lighting?
 - If the LED is orange and steady: cock the camera, load a new film, or change it (because it’s finished)
 - If the LED is red and steady: remove the dark slide.
 - If the LED is red and is flashing: change the battery.
 - If there is no LED in the viewfinder and the RZ still refuses to shoot: change the battery (it could be totally out). And if it still not working, try another battery.

- You may also try another back and another lens, just in case.
- If you are using the prism AE, try with the waist viewfinder instead.

If these problems persist, there's probably a significant issue that you can't solve yourself, and your camera needs repair. I should add: I had similar problems to those here a few years ago and tried many batteries I had kept stored for quite some time. Just before resolving myself to send the camera for repair (I was convinced it had a big issue), I decided to purchase a new (fresh) battery in a shop to test it, just in case.

My camera suddenly resurrected itself! Just a thought.

Problems with the prism (FE701)

One problem you may have after installing the FE701 prism, you see not visual indicators in the viewfinder. No LED alarms or exposure indications. In this case, it's simple: you have forgotten to put the speed dial of the camera to "AEF". The camera doesn't know you wish to use an FE701 prism, so it behaves like with the waist level viewfinder! If this does not resolve the issue, try cleaning the electrical contacts. You can use a tiny amount of 90° alcohol, but take care to not use too much.

Problems removing a lens

I have had this problem in the past and I know it can be quite disturbing during a shoot. The primary reason will be because your camera is not cocked, so check if your camera is cocked. The reason you can't remove a lens when the mirror is up is to avoid to fog your film. If it doesn't work, it could be a battery problem again, so change it. After doing so, cock the shutter, or shoot and cock the camera again. Take a look at the lens: is the mirror plug for a release cable shows you a red circle? If yes, screw a cable in and unscrew it slowly until the red circle goes back inside the lens.

Take care not to tighten the breech lock barrel too much when you mount them: they may be hard to remove after that.

Here's another little checklist to go through when you can't remove a lens:

- Cock the camera.
- Make sure there is no cable release on the lens.
- Make sure the red mirror plug isn't protruding from the lens.
- Ensure the RM lever is in its central position.
- Change the battery.
- Try to take an image and cock the camera again. If you can't, have a look in the previous chapter.

Usually, one of these tips let you remove the lens at the end. If not, your camera may need a professional repair.

Always try multiple batteries. You may be using a brand new battery (never used before) that has discharged over time.

Problems mounting a lens

The main reason that causes this is that the lens is already cocked. The two spindles on the rear of the lens may be in the wrong position. You can have this problem with a brand new lens, or a lens that was set in this configuration for storage.

In this case, the shutter is also closed. I had the problem with the 180mm Soft lens I purchased brand new.

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You can see in this image above that the 2 spindles are in the “storage” position, with the shutter closed in the lens. You can’t install a lens if its spindles are like that.

**If the spindle a
no**



The two spindles must be in between the red and green dots on the rear of the lens. If not, try to lightly push them with your fingers until they move to the position they have to be. When set to the correct position, the shutter will be open.

If you are still having issues, another possibility is that the camera is cocked (the mirror is up). Note: It's normally not possible to get this situation with a lens removed. Put the RM lever on "M", and try to shoot. Put back the RM lever in its central position, cock the camera, and try to install the lens again.

Problems removing the film holder (back)

This is often because the dark slide is not inserted into the holder on the front side to protect the film.

Problems with the winder

First check:

- The RM lever is in the central position.
- The release button needs to be in the "Shoot" position.
- The film holder dark slide has been removed.
- The camera is correctly set (AEF if you use the FE701 viewfinder, a manual speed but settled with the camera speed dial, in other cases).
- Make sure the winder's On/Off button is "ON".
- The film is wound to the first frame.
- If the previous roll of film is not finished (if it's finished, you then need to load a new film).

It may also be related to a winder battery problem, so change them. Take care of the orientation when you install new batteries as the spring positions are counterintuitive.

Another often encountered problem is when the camera takes one shot and do nothing after (no winder sound). In this case, it's simple, just put the ON/OFF switch on the winder into the ON position. Bear in mind to manually cock the camera anyway. If this does nothing, change the batteries of the winder.

Another possibility is that the camera refuses to shoot after changing the film. Check if the ON/OFF switch is in the ON position, and then, push the "START" button (on the back of the winder). The winder winds the film until you can see "1" in the counter view on the back. Then, you can shoot!

The last possibility is that you forget to open the winder connection flap under the camera. This flap protects the drive transmission pinion and needs to be visible when you install the winder. If closed,

the transmission will not be engaged and the winder may seem to turn but the camera is not advanced/cocked. Remove the winder, open the flap under the camera and reinstall the winder.

Problems with the remote control (FS401)

You have installed the remote to use the camera from a distance, but when you push the shoot button, nothing happens. First, follow the checklist of the “The camera refuses to fire” section above. The most important actions to try are:

- Ensuring the RM lever is in the central position.
- Ensuring the release button is in the “Shoot” position
- Ensuring the dark slide is removed
- Ensuring the camera is correctly set (AEL if you use the FE701 viewfinder, a manual speed in other cases)
- If you use the winder, it must be in the ON position, and you have to push the start button after installing a new film.

With the remote control FS401, you have two elements: the emitter and the receiver. Both need to be in the “ON” position. The emitter has a permanent orange led to show the battery state and that it works. For the receiver, you need to push a little button to check its batteries state. If one of them doesn’t light, change the batteries and be careful of the orientation of the batteries when you change them.

Also, the transmitter and receiver both need to be set to the same channel – 1-1, 2-2 or 3-3 on both.

Check if the receiver plug is correctly installed on the camera and locked (L position).

If you use flashes in a studio, remember that the remote control FS401 uses IR frequencies. The main problem that I have, described above in the chapter about this remote system, is I get dark results with my shots. The problem comes because the IR frequencies used by the remote triggers the flashes before the real shot, and the flashes didn’t have enough time to charge again. So the flashes light a little before the shot, not during the shot. To resolve the problem, I have to turn off the “Eye slave” function on all the flashes, and bought a radio transmitter system instead, using radio frequencies. I tried different systems and the best I still use today is the Godox XPro with SK400 V2 flashes. I choose the N version because I also work with a Nikon DSLR, but it works perfectly with the RZ (without the TTL, obviously), and also with the Mamiya 645 AFDII.

Other miscellaneous problems

If you get images with a strange overall color (yellow, orange or red), it’s probably because you forget to remove a B&W filter and using a color film... Remember that with the 37mm, the filter is on the back of the lens!

Jokes apart, I had some little weird problems with my camera. Not because of the camera system itself, mostly because of me.

One time, I used a very old color film to test it. The tape that holds the film on the paper came off (inside the back, after installation), and the film did not wind up properly. I noticed it, because of the noise and the cocking lever forced. As the cocking lever couldn't be moved, the back couldn't be removed. But fortunately, it could be opened. Slightly angry, I removed the old film quickly to put a new film instead and I started my photos again. After developing my film, the one that followed the old film, I was surprised to discover this:



“Hello, I’m the tape of the previous film!” I got it on every image taken with this roll, and I really didn’t see it when I put a new film on the film back until I developed the film a few weeks later. From there, I avoided using very old rolls of film...

Recently, I broke the end of a release cable screwed in the socket of the RZ. First, unusable cable, and then the end that remained in the socket prevented the installation of another. I a pair of small tweezers to unscrew the piece stuck in the socket and I was able to remove the broken part. Phew!

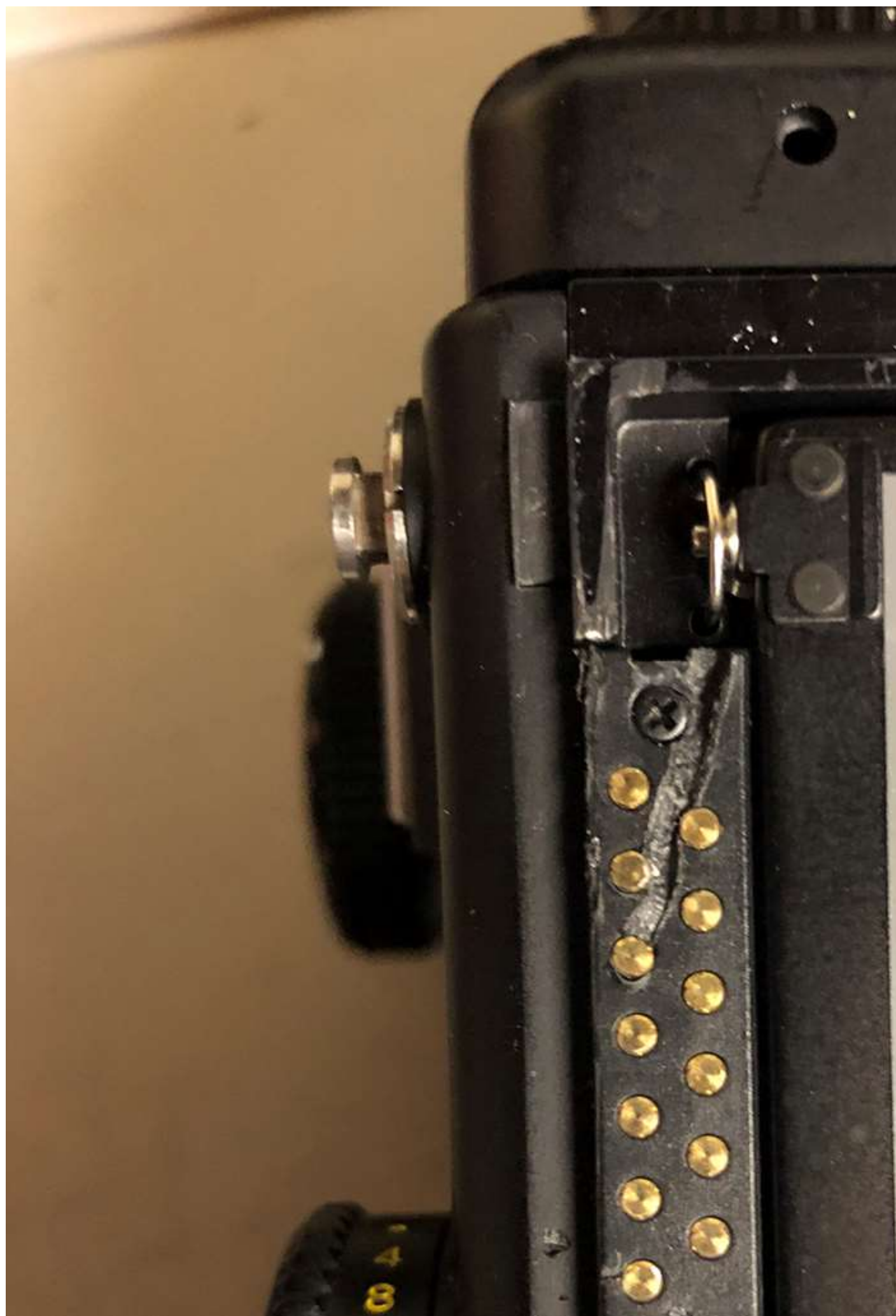
And to finish, some weeks ago, I had a big car accident in the mountains around where I live. My RZ was configured with the prism mounted inside a closed Peli case. After the accident, I discovered I had three broken ribs, a lot of scratches on my arms, a black eye and shifted shoulders. In short: a lot of pain. After 3 days in hospital, I went home and opened the Peli case. I discovered that my RZ also had broken bones... sorry, parts: My Type E focus screen was broken, the prism was deformed and one of the clips of the neck strap was bent.



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The prism no longer stays on the RZ and the bent strap clip was impossible to reattach. So, I went to visit online my preferred provider and I repurchased all of the broken components. Fortunately, he has all that I needed. Three days later, I received a new Type E focus screen, a new prism and a new neck strap. Not really brand new, but new for me. I tested my RZ, and it seems that it had no other problems.

The advice I can give you after all this is to never leave the prism attached on the camera when transporting it. Always disassemble all parts and store them separately and safely (if you have one, inside its pouch). Because carrying the mounted camera, ready to shoot, during transport can cause serious problems in case of an accident like mine. Even in a solid closed Peli case.

Sending your camera for repair

In most countries, Mamiya (including Mamiya America Corporation) is now totally owned by Phase One, which can repair your camera in case of malfunction. Mamiya's in-house repair provides an assessment service, which can increase the final bill. Regardless of where you send your RZ67 for repair, to avoid more damage during transport, please be sure to use caps to protect your camera.







The front cap is easy to install (like a lens), but it does not lock very well. For the back cover, set the RM lever in the R position to install it or to remove it, and back in the middle place in the meantime to block it. Unfortunately, Mamiya has not made any cover to replace the viewfinder, but I think it's essential to send the focusing screen you use for the repairs.

Those cap & cover can be used to protect the body camera in all other cases.

Final thoughts

That's about it for the system description part of this series. I hope you have found it useful. The Mamiya RZ67 really is one of the most flexible medium format camera systems ever made, and can be found for considerably cheaper than similar SLR systems from Hasselblad, Rolleiflex, etc.

The breadth of lens and accessory options mean that it can truly be configured to the desires and needs of the photographers and the current secondhand market price means that it is possible to create a reasonably-sized system relatively inexpensively.

The camera is heavy, there is no doubt about that but don't let that dissuade you from hand-holding it. I use mine for street photography and landscape photography without a tripod. It can be tiring but the results are worth it!

I would love to hear your thoughts in the comments section below.

~ **Pierre-Gilles**