



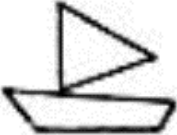
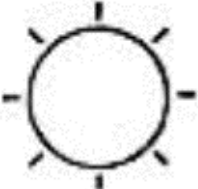
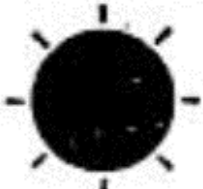



AGAT

18

Instruction manual translated by Spaqin

ATTENTION!

In your camera you set the exposure according to weather conditions.

Weather conditions					
“Subject on snow, in the mountains, at the sea”	“Sunny”	“Sun in haze”	“Sun behind the clouds”	“Cloudy”	“Thunderstorm”
					

1. General information

“Agat 18” is a modern compact scale camera*, designed for a wide circle of amateur photographers.

Single-coated lens with ample optical characteristics and a wide angle of view, optical viewfinder and plenty of exposure settings, operated with a shutter-diaphragm mechanism, let you take pictures in diverse settings.

A distinctive characteristic of this camera is a simplified exposure setting process, using only symbols.

Before using the camera, please get familiar with the device, read carefully instructions of handling and operating procedures in this manual. Compliance with these rules will ensure proper exploitation of the camera for many coming years.

As a result of constant improvement of the construction of the camera, there may be slight discrepancies between this manual and your device.

At the moment of purchase of the camera, demand a check of its working condition from the seller. Make sure that in the certificate of acceptance and in the warranty card there are stamps of the store, seller’s signature and selling date. Check the completeness of the package.

Remember! The lens cannot be removed. Any attempts to remove the lens may result in damage to the camera.

* scale camera – synonymous to viewfinder camera (no focusing help)

2. Technical data

Lens	.	.	.	.	“Industar-104”
Focal length, mm	.	.	.	.	28
Minimum aperture	.	.	.	.	1:2,8
Frame format, mm	.	.	.	.	18x24
Number of frames	.	.	.	.	72
Limits of focus, m	.	.	.	.	from 0,9 to ∞
Range of exposure parameters	.	.	.	.	from 1:2,8 and 1/60s to 1:16 and 1/250s
Setting exposure	.	.	.	.	using weather symbols
Overall size, mm, not bigger than	.	.	.	.	95x60x45
Mass, kg, not more than	.	.	.	.	0,19

The camera was built using copyrighted patent of USSR No. 215546, 36647.

3. Contents of the box

<i>Item</i>	<i>Count</i>
<i>Camera</i>	1
<i>Lanyard</i>	1
<i>Lens cover*</i>	1
<i>Hot shoe cover**</i>	1
<i>Packaging box</i>	1
<i>Manual</i>	1

* Found on the lens.

** Already installed on the camera.

4. Camera device

The camera consists of two separate parts: the body with all the mechanisms and the removable cover with the viewfinder.

On the body with the mechanisms are installed: lens, shutter, film transport knob connected to the receiving take-up spool, shutter cocking gear, shutter release button, rewind enable button and a hotshoe.

The camera has a frame skipping lock, disallowing accidental multiple exposures.

Focusing of the lens is achieved by turning the distance scale, and setting the exposure is done by rotating the ring with the weather symbols.

The controls and functional elements are shown on the figures (1-4).

1 – shutter release button

2 – film rewind lever

3 – film winding knob

4 – film transport lock button

5 – hotshoe

6 – hotshoe cover

7 – viewfinder (front lens)

8 – main lens

9 – focusing ring

10 – film sensitivity ring

11 – depth of field ring

12 – exposure setting ring

13 – removable cover

14 – removable cover lock slider

15 – shutter winder gear

16 – take-up spool

17 – film counter window

18 – viewfinder window

19 – folding film pressure plate

20 – tripod mount

21 – lens cover

General view

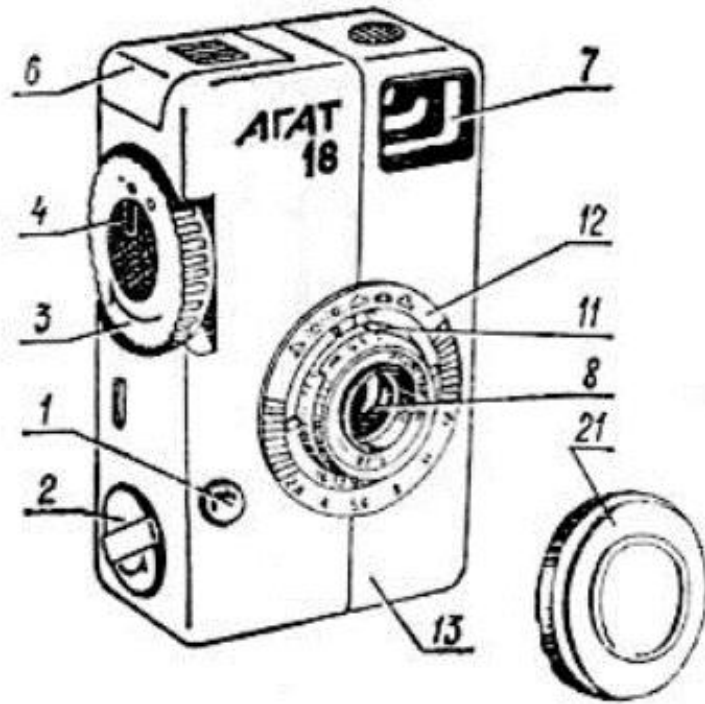


Figure 1

View from the tripod socket

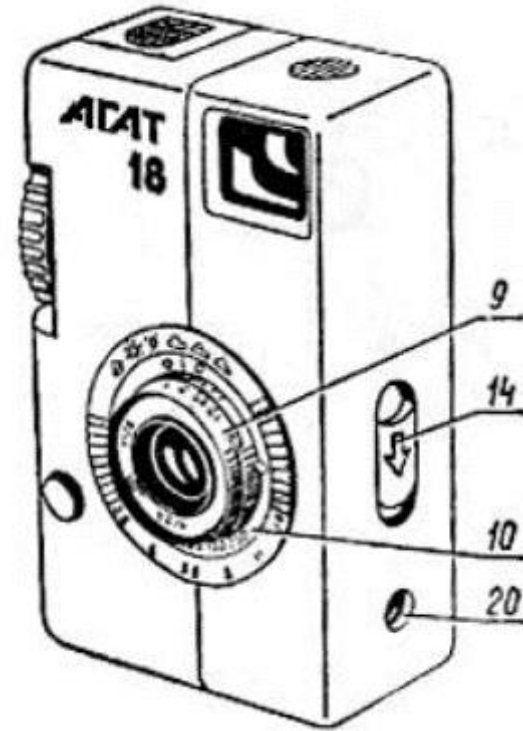


Figure 2

Camera with the cover removed

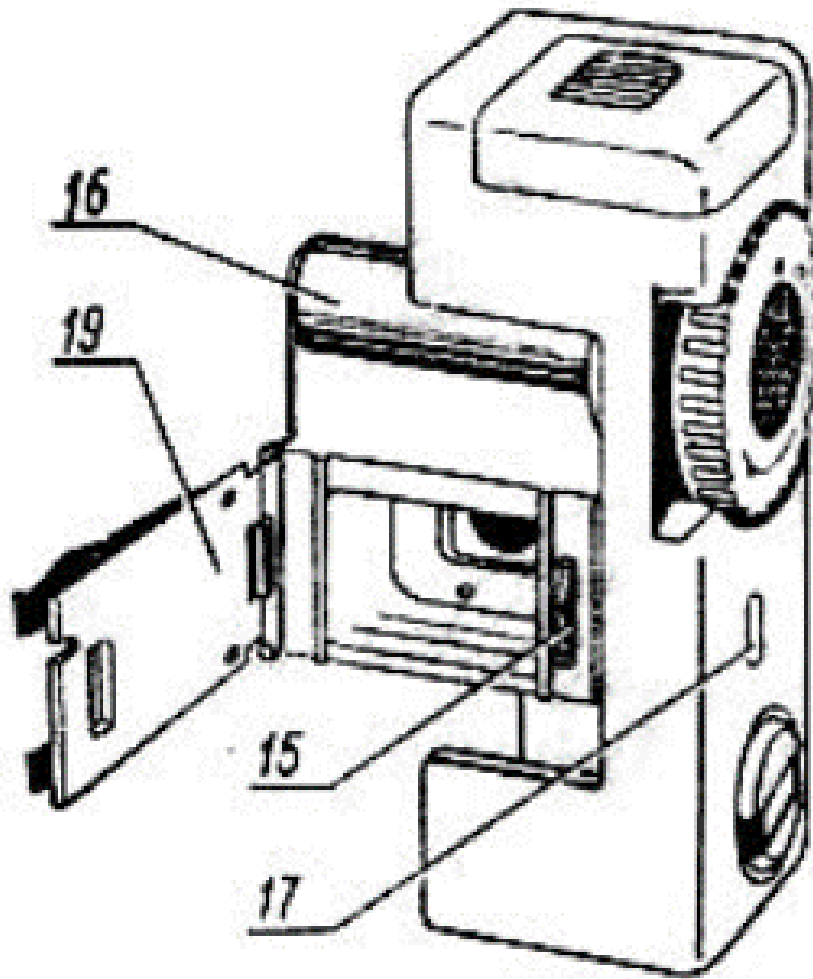


Figure 3

Rear view

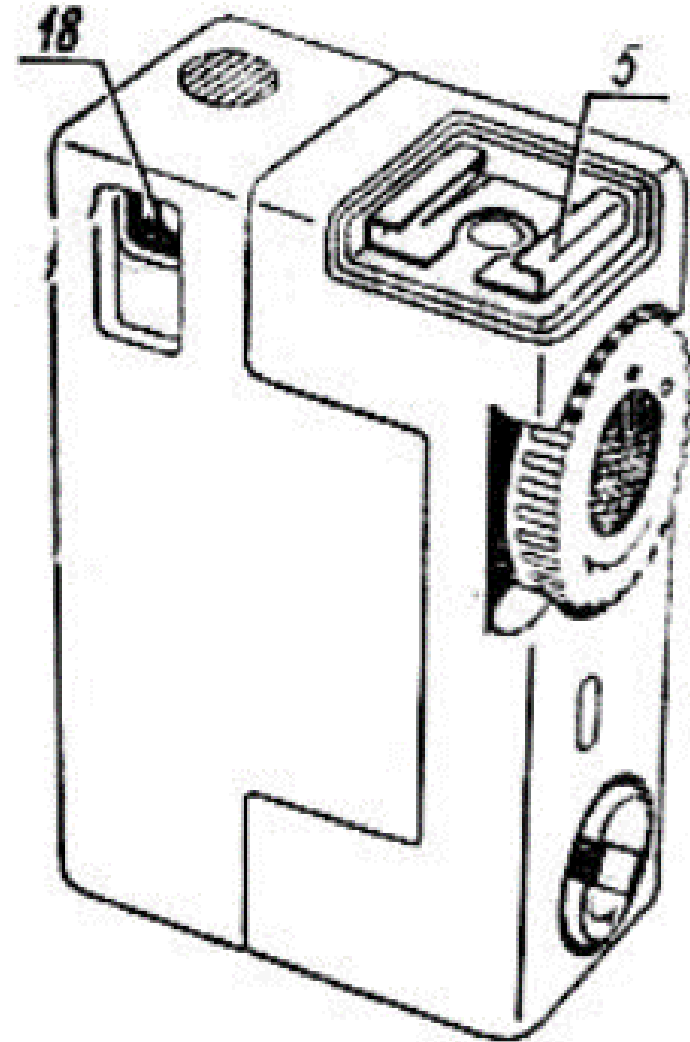


Figure 4

5. Setting up the camera

5.1. Loading the camera

Before proceeding to load the camera, make sure that the film is properly loaded in the cassette.

Attention! If you are using a metal cassette, make sure the lids are fully tightened up before loading the camera, so the protruding part of the cassette is facing right.

Remember that the construction of plastic cassettes from brands such as “Orwo-Color” or “Orwo-Chrom” are designed for single use. Reusing those cassettes is not recommended.

5.1.1. Take the camera in your hands, as shown on figure 5. Slide the lock (14) in the direction shown on the arrow, and holding it in this position, remove the camera cover (13).

Removing the cover

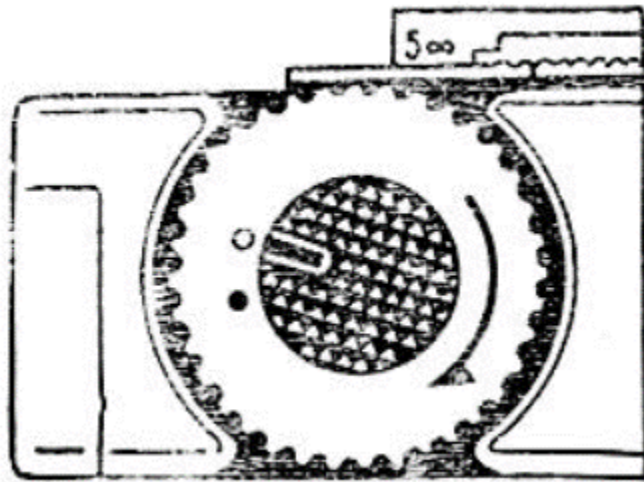


Figure 5

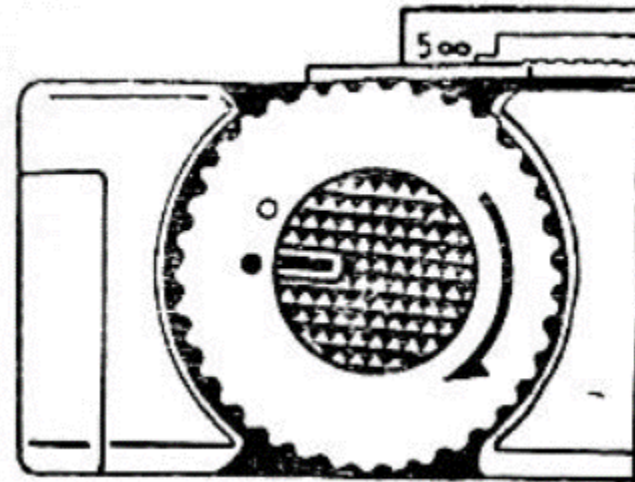
In an unloaded camera, you can still cock the shutter by turning the gear (15) in the direction of the take-up spool.

5.1.2. Set the film transport lock button (4) in the normal operating position. For this, using your finger, press the button all the way in, and rotate it clockwise until you line up the line with the white dot. (fig. 6a). If pressing the button proves to be difficult, rotate the take-up spool (16) slightly in any direction.

Rewind button position



a – normal working position



b – rewinding position

Figure 6

5.1.3. Open the foldable film pressure plate (19), put the film cassette in place, pull the film leader into the slot in the take-up spool (16) so that it protrudes from the other side of the spool. Make sure that the film is straight in its path, and the film perforations go over both the winding gear's (15), and the take-up spool teeth.

Close the foldable film pressure plate. The loaded film and film support protrusions should snugly fit in the pressure plate slot in corresponding grooves (fig. 7).

Release the shutter if it has been cocked, and while holding the pressure plate (19) with your finger, rotate the film winding knob (3) to make sure, that the film wraps around the take-up spool and the shutter winding gear rotates freely.

Put back the removable cover (13) back. To do this, line up the internal edges of the cover with corresponding guiding grooves in the other half and push it in straight, avoiding any skews, until it's closed and you feel resistance. With that, the spring-loaded lock slider (14) slides back.

Loading the film

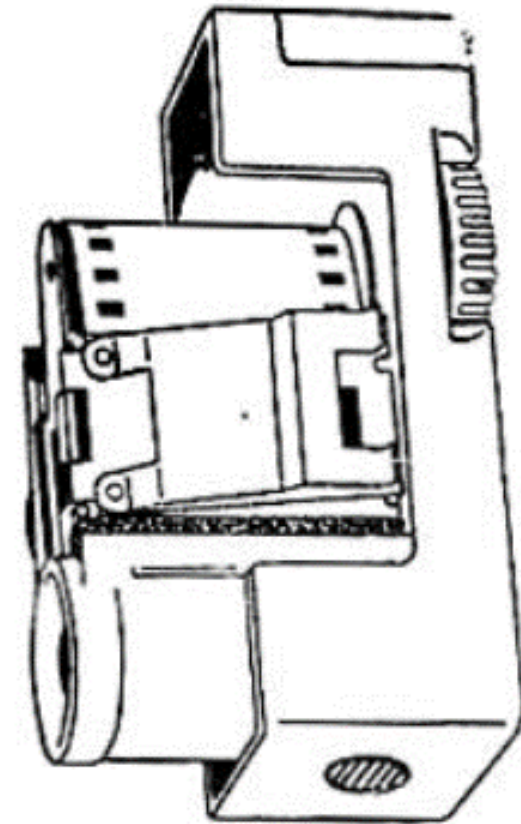


Figure 7

Then, wind the exposed part of the film all the way to the take-up spool. For this, rotate the winding knob (3) clockwise, until you feel resistance, and then press the shutter release button (1). Repeat this process 2-3 times.

If during that attempt the winding knob could not be rotated, it means the shutter is cocked – press the shutter release button. If the winding knob does not stop and can be rotated freely, check if the film transport lock button is in the operating position, or correct the film engagement in the take-up spool.

5.2. Setting up the film sensitivity

Set the light sensitivity value of film by rotating the film sensitivity ring (10) until the chosen value is lined up with the line on the lower part of the depth of field ring (11). You can also set the ring to any intermediate light sensitivity values.

6. Instruction of operation

6.1. Setting the exposure using symbols

Remove the cover (21) from the lens. Estimate the weather (sky) conditions, and by rotating the exposure setting ring (12) set the chosen symbol, by lining it up with the black line on the film sensitivity ring (10).

When choosing the weather symbol, take note of the following:

- at film sensitivity of 16 GOST* you cannot choose the symbols “Thunderstorm” and “Cloudy”;
- at film sensitivity of 32 GOST* you cannot choose the symbol “Thunderstorm”.

This means that photographing on film of aforementioned sensitivities, at corresponding weather conditions, is not recommended without additional subject lighting.

Exposure set in that way, i.e. aperture and shutter speed, will be automatically worked out by the camera’s diaphragm-shutter mechanism. If necessary, the diaphragm value can be read from the lower part of the exposure setting ring (12). The chosen value is lined up with the white line on the bottom half of the depth of field ring (11). The worked out shutter speed can be estimated using the table below.

* 16 or 32 GOST are equal to roughly 16 and 32 ASA, respectively. The equality does not hold true for higher values, however – e.g. 250 GOST is equal to 320 ASA.

Set diaphragm value	2,8		4		5,6		8		11		16
Estimated shutter speed, s	1/60					1/125					1/250

The shutter speed value changes smoothly between the values.

However, sometimes a need may arise to correct the exposure slightly, for example, when the object (subject) is very dark, or on the contrary, very bright. For those cases, on the film sensitivity ring (10), there are located two additional symbols near the exposure line, for “light” and “dark”. Shifting the chosen exposure symbol to the “light” symbol will reduce the exposure by the factor of 2*, and shifting it towards the “dark” symbol – will increase it by the factor of 2*.

When shooting in lighting conditions significantly different from those on the weather symbols, a light meter may be useful. While reading the values from the light meter, you should choose the aperture and shutter speed values closest to those on the table above.

* essentially, by 1 stop under and over, respectively.

6.2. Setting the focusing distance

Setting the distance to the object (subject) of the photograph is done by lining up the appropriate distance on the focusing ring (9) with the line on the upper part of the depth of field ring (11). Small mistakes with setting up the focus don't matter much, because the lens produces large depth of field.

6.3. Cocking the shutter

Rotate the film winding knob (3) clockwise until you feel resistance.

Shutter is cocked by the film moving inside.

6.4. Photographing

Looking through the viewfinder (18), move the camera on the subject you wish to capture in such a way, that it fits inside the glowing frame borders in the viewfinder. If the subject is closer than 3 meters from the camera, the borders of the frame are determined using parallax marks located inside the glowing borders (fig. 8).

Release the shutter, smoothly pressing the shutter button (1).

Framing borders lines in the viewfinder



Figure 8

6.5. Photographing with a flash

„Agat 18” camera is equipped with a hot shoe for cordless (hot shoe compatible) electronic flashes.

To use one, remove the hot shoe cover (6) and insert the flash connector in the hot shoe (5). Flash can be installed or removed with the shutter either cocked or uncocked.

Detailed instructions on using the flash are included in the manual of your unit.

Setting the camera to work with flash is done using the exposure ring (12) only between apertures between 2,8 and 16.

6.6. Unloading the camera

Once the frame counter window shows you have done 72 photos, you can finally unload the camera. To do this, press the film transport lock button (4) and rotate it counter-clockwise, until it lines up with the red dot (figure 6 b). Unfold the film rewind lever (2) and by rotating it in the direction of the arrow located on the lever, return the film to its original cassette. When the film is loaded back you will feel a small jerk and further rotations will be with much less resistance. Remove the camera cover (13) and retrieve the cassette. The frame counter window will also automatically return to zero.

7. Technical maintenance

The camera requires careful handling. It needs to be kept in a clean environment and protected from mechanical damage, moisture and sudden fluctuations of temperature.

Cleaning the surfaces of the lens and the viewfinder should be done by gently rubbing a flannel napkin or cotton wool, slightly damped with technical alcohol, or a soft brush.

Disassembling the camera by yourself is not allowed, as the process may permanently damage the camera or cause miscalibration of precise elements. Repair and adjustment must be done only by qualified specialists in repair shops.

Introducing any lubricant to the camera is strictly forbidden.

8. Possible malfunctions and methods of their repair

Malfunction	Root cause	Method of repair
When winding the shutter (camera is loaded with film), the winding knob cannot be turned.	<ol style="list-style-type: none">1. Due to incorrect film loading, the film is not winding on the take-up spool.2. The rewind button is in incorrect position.	<p>Remove the cover and load the camera properly.</p> <p>Set the rewind button in the operating position (fig. 6)</p>

9. Warranty commitments

This “Agat 18” camera comes from an approved and quality tested batch. The manufacturer guarantees that the product is complaint with TUZ-3.377-83, as long as it is operated according to this owner’s manual.

The construction and technology process of this camera will provide many years of use. In case of a malfunction in 18 months from the day of purchase, the consumer has the right of repair in an authorized warranty repair workshop, free of charge. The address of the workshop is provided by the store during sale.

Exchange of malfunctioning products is carried out by the distribution facility upon showing the certificate supplied by the repair center and the warranty card, in accordance to your republic’s requirements on exchange of industrial goods purchased in retail distribution networks of state and cooperative trade.

Warranty claim will not be accepted if the malfunction is caused by carelessness or neglect of the camera’s user, the camera bears signs of disassembly, or the lack of the store’s stamp or date of purchase in this manual.

Cameras malfunctioning during the warranty period can be repaired free of charge by bringing it to one of photo and movie camera repair and maintenance centers or by sending it through post

as a valued parcel in complete package, including the manual and a list of noticed malfunctions to the following address: 222410 Vileyka, Minsk Oblast, “Zenit” factory.

Other repair workshops do not accept sent parcels.

10. Certificate of inspection

“Agat 18” camera serial number _____

is compliant with technical specifications TUZ-3.377-83 and is recognized fit for use.

Date of issue “ _____ ” _____ 19__

Manufacturing mechanic _____

OTK inspector _____

Date of sale _____ 19__

Store stamp _____

Retail price _____ 19 rub.

TALON COUPON No. 1

For technical service of "Agat 18" Camera

Received _____ 19__
Workshop mechanic _____

Last name and signature

Cutting line

Vileyka factory

TALON No. 1

For technical service of "Agat 18" camera

Factory No. _____

OTK inspector _____

" _____ " _____ 19__

Sold by store No. _____

" _____ " _____ 19__

Store stamp

Store owner and his address _____

_____ Signed _____

