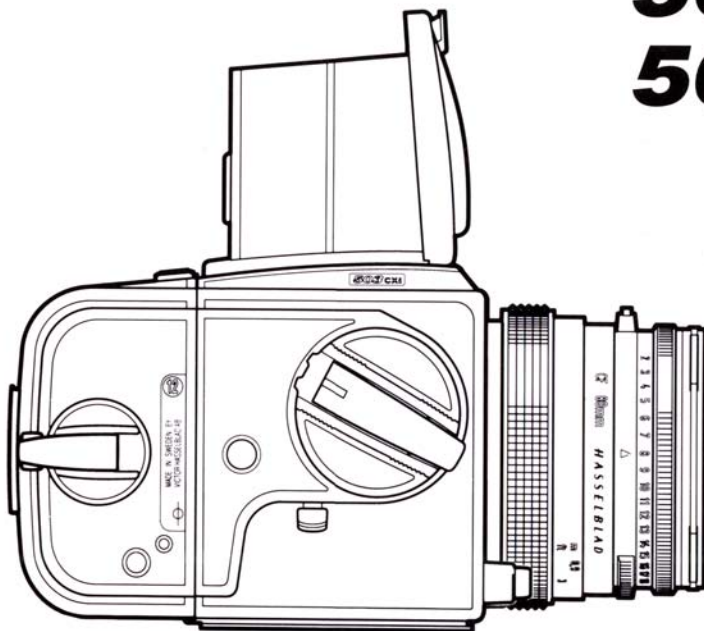


# H A S S E L B L A D

## 503cx

## 503cxi

## 500 *Classic*



INSTRUCTION MANUAL

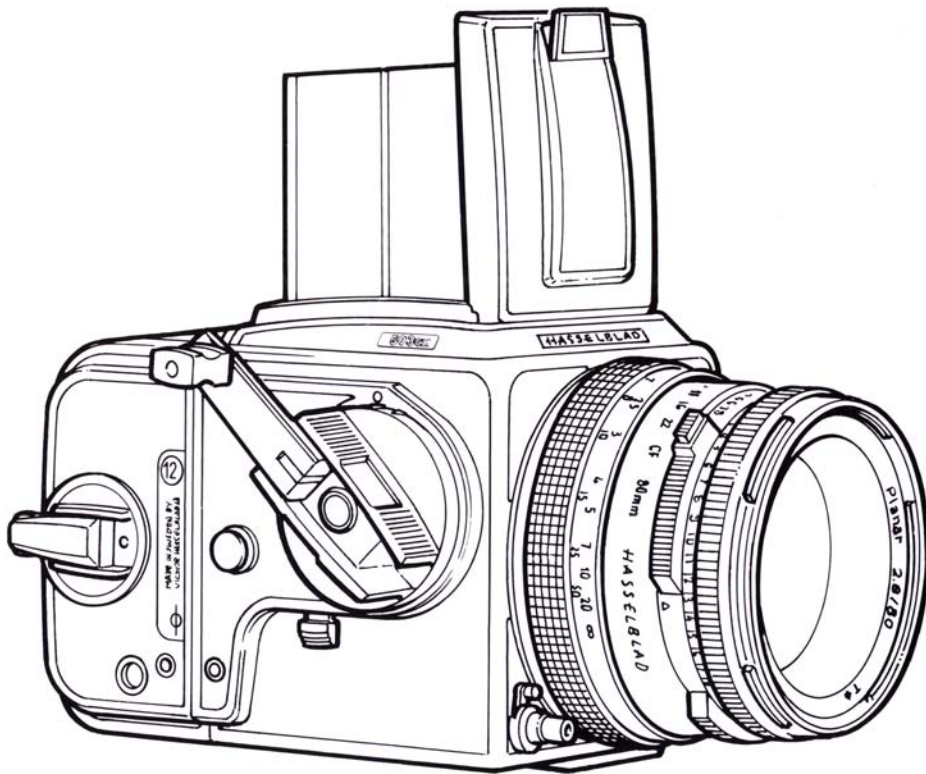


# Hasselblad 503CX, 503CXi and 500 Classic Manual

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### **Guarantee**

Provided that you bought your camera from an authorized Hasselblad outlet, it is covered by an international guarantee for one year. Further details can be found on page 34.

### **Service and Maintenance**

Whilst Hasselblad equipment is extremely reliable and durable, cameras and lenses that are in constant intensive use in a professional environment should be maintained and serviced by an authorized Hasselblad service centre at regular intervals. Further information on service and maintenance can be found on page 34.

# Introduction to the Hasselblad Camera System

As a Hasselblad owner you have in your possession a camera of exceptional quality the product of an internationally renowned tradition of excellence in the world of photography. Victor Hasselblad, the father of the cameras which bear his name, was himself an accomplished photographer. It was to satisfy his own exacting standards and diverse requirements that he first envisioned the Hasselblad system: a medium format single lens reflex camera with interchangeable lenses and film magazines. A photographer first and businessman second, Victor Hasselblad would never sacrifice quality for ease of production. To this day, Hasselblad cameras are painstakingly crafted with this principle in mind.

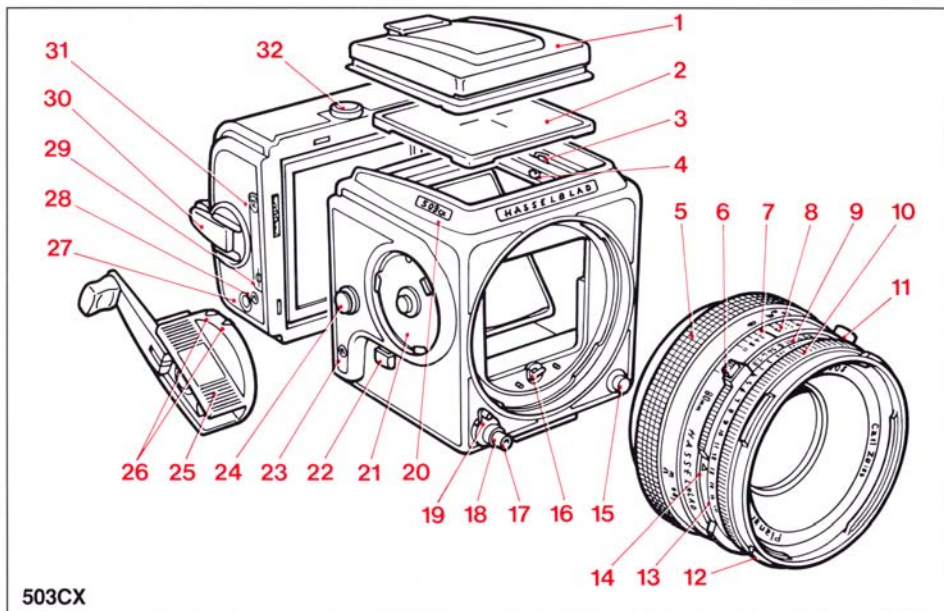
The Hasselblad system has been taken to the ends of the earth and beyond - into space, to earn its reputation for reliability and absolute fidelity. A range of accessories affords limitless flexibility and the potential for paramount photography in any application. The realization of this potential is of course dependent upon the skill, care and judgment of the photographer.

The Hasselblad 503CX, 503CXi and 500 Classic are medium format single lens reflex cameras featuring lens, magazine, viewfinder and focusing screen interchangeability. The 503CX is an upgraded version of the 500 Classic with 'TTL' (through the lens) 'OTF' (Off The Film) flash metering and a number of additional refinements. The 503CXi is a further refinement of the 503CX. The Hasselblad 500 Classic is a 500C/M camera body with a micro raster /line grid focusing screen complete with the Planar CF 2,8/80 mm lens and the A12 film magazine

This instruction manual describes in detail how to operate these cameras. Where the operation of the cameras is the same a single set of instructions common to both models is presented. The illustrations accompanying the common instructions show the 503CX but apply equally to the 503CXi and 500 Classic. Where there are operating differences between the 503CX, 503CXi and the 500 C/M, these are documented separately.

## Lenses

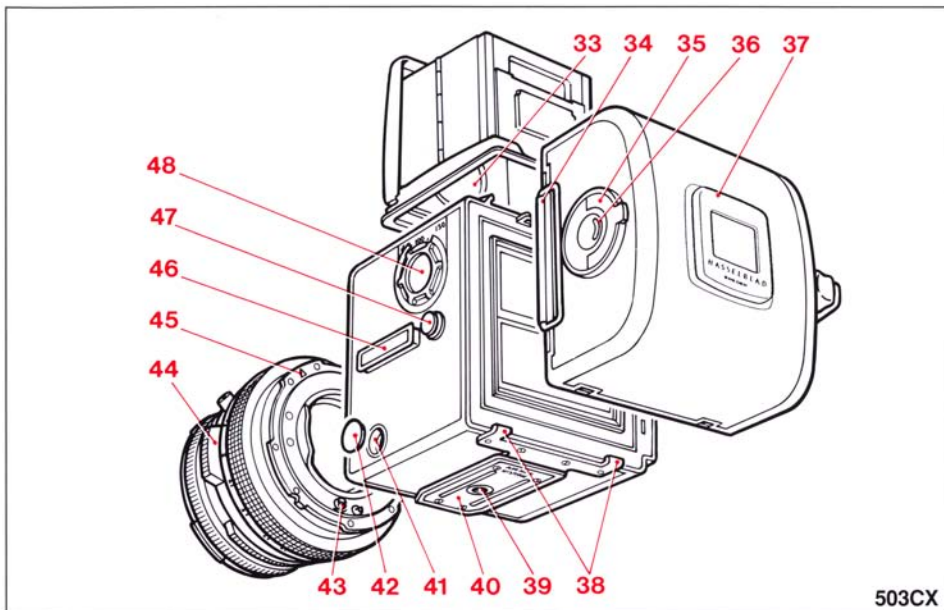
Since the early 1950's Hasselblad lenses have been manufactured by Carl Zeiss in Germany. The Hasselblad 503CX and 500 Classic use CF and C lenses made by Carl Zeiss. With the exception of F-type lenses, all Hasselblad lenses manufactured since 1957 can be used with the 503CX and 500 Classic. F-lenses can only be used with the Hasselblad 200 and 2000 series cameras. Use this manual to learn how to operate your camera. The knowledge gained from reading it will give you access to the Hasselblad potential. Exploiting the potential is left to your imagination!



503CX

## 503CX och 500 Classic, Parts and Components

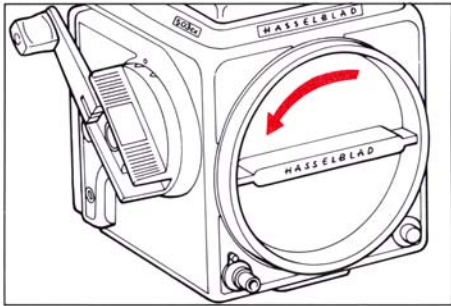
- |   |   |                               |
|---|---|-------------------------------|
| 1. Focusing hood  | 9. Aperture ring and scale                        | 21. Winding crank bayonet     |
| 2. Focusing screen 10.<br>503CX: Acute-Matte' screen<br>500C/M: Ground-glass screen<br>500 Classic: Grid & microprism<br>screen | 10. Shutter speed selector ring                   | 22. Pre-release button        |
| 3. Screen retaining clip  | 11. PC flash terminal                             | 23. Camera status indicator   |
| 4. Flash function indicator**   | 12. External and internal lens<br>accessory mount | 24. Strap lug                 |
| 5. Focusing ring and scale  | 13. Exposure value scale                          | 25. Winding crank             |
| 6. Shutter speed and aperture<br>interlock button   | 14. Exposure value index                          | 26. Winding crank index       |
| 7. Central lens index   | 15. Lens release button                           | 27. Frame counter             |
| 8. Depth-of-field scale   | 16. Drive shaft                                   | 28. Magazine status indicator |
|   | 17. Threaded cable release socket                 | 29. Film plane index          |
|   | 18. Shutter release button                        | 30. Film winding crank        |
|   | 19. Time exposure catch                           | 31. Magazine designation      |
|   | 20. Name plate**                                  | 32. Magazine catch            |



503CX

- |                             |                                 |                                   |
|-----------------------------|---------------------------------|-----------------------------------|
| 33. Focusing hood magnifier | 40. Quick coupling plate        | 47. Strap lug                     |
| 34. Magazine slide          | 41. Dedicated flash connector** | 48. Film speed selector**         |
| 35. Film holder key         | 42. Connector cover**           |                                   |
| 36. Film load indicator     | 43. Lens drive shaft            | * Acute-Matte designed by MINOLTA |
| 37. Film tab holder         | 44. Depth-of-field preview knob | ** 503CX only                     |
| 38. Magazine supports       | 45. Lens locating index         |                                   |
| 39. Tripod thread 1/4"      | 46. Accessory rail              |                                   |

NOTE: In the text, the positions of components are described in relation to the camera as you see it when taking a photograph, i.e. the lens is on the front, the viewfinder on the top, and the winding crank is on the right hand side.



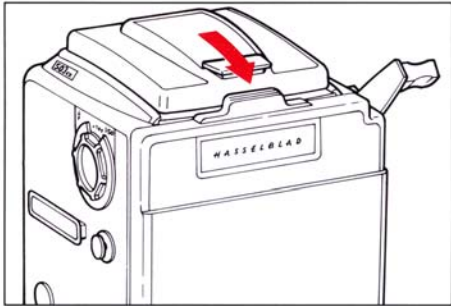
## Basic Operation

This section describes the steps you must take to make the camera ready to use. You will find comprehensive information on how to operate the camera in the following sections. With the camera, lens, and film magazine unwrapped but unassembled, ensure that the camera is cocked (i.e. the mechanism is fully wound). otherwise the circular front protective cover cannot be removed. The winding crank on the right hand side of the camera is locked if the mechanism is fully wound. If the crank is not locked, rotate it clockwise until it does lock.

## Front Protective Cover

Turn the cover (bayonet fitting) in the direction of the arrow and remove.

**NOTE:** The front protective cover may only be removed when the camera is cocked (fully wound) .



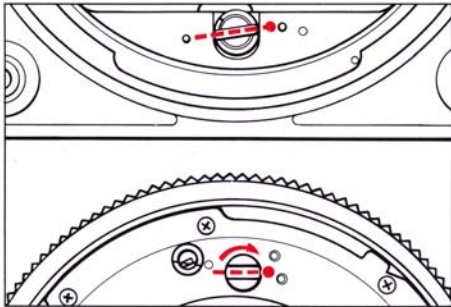
## Rear Protective Cover

Depress the catch, tilt the cover backwards, and lift it off.

## Attaching the Lens

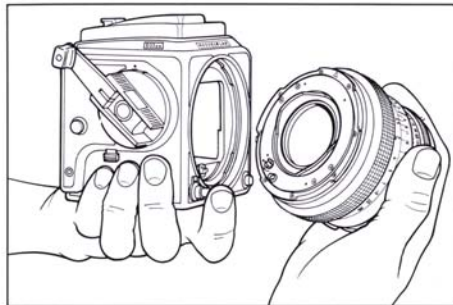
Make sure that both camera and lens are fully cocked. The adjacent illustration shows the correct relationship between the drive shaft, the lens drive coupling and their indexes.

If the lens is not cocked, you can insert a coin in the coupling slot and rotate it clockwise until it locks (about 4/5 of a turn).

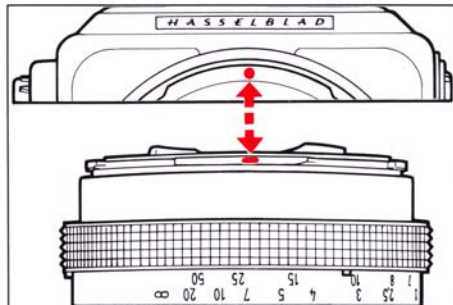




You will find that holding the camera in your left hand and the lens in your right hand, as shown in the illustration, is the easiest way of attaching the lens.



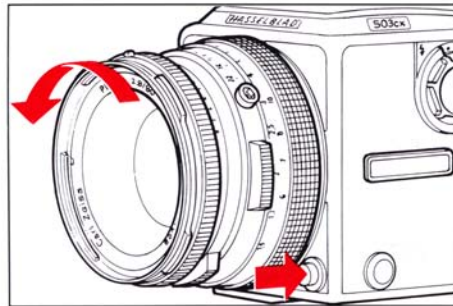
When you have aligned the red index on the lens with the one on the camera as shown in the illustration, the lens will drop easily into the bayonet fitting. You can then rotate it clockwise until it stops with a faint click as the lens catch locks it in place.

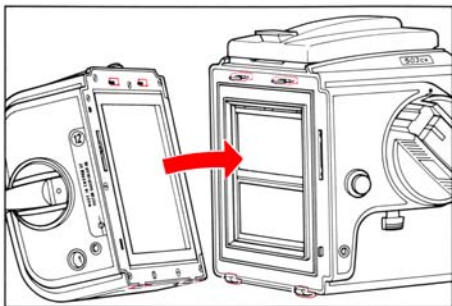


### Removing the Lens

Depress the lens release button and rotate the lens counter-clockwise until it stops.

**NOTE:** You can only remove the lens when the camera is cocked (fully wound) and not in the pre-released mode (see page 13).

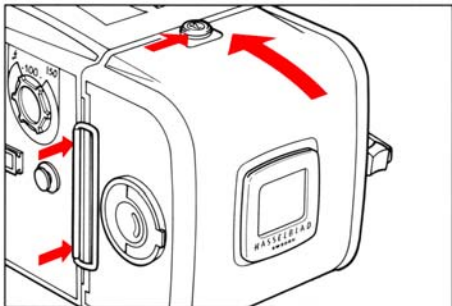




### Attaching the Magazine

Ensure that the magazine slide is fully inserted, and that the indicators are white: If the indicators are not white, then refer to the instruction on page 9.

Rest the magazine on the camera's lower support hooks and make sure that it is properly located on them. Carefully swing the magazine towards the camera body and check that the camera's upper support hooks fit into the slots in the magazine. Push the magazine gently but firmly against the hooks while sliding the magazine catch button to the right. Release the button when the magazine has made contact with the rear plate of the camera, and push it to the left to ensure that it has reached the locked position. Remove the magazine slide and the camera is ready to use.

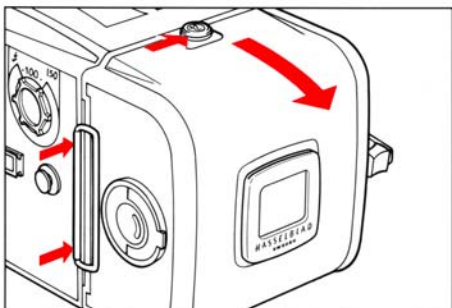


### Removing the Magazine

It is advisable to have the camera cocked (fully wound) and the magazine and camera indicators both displaying white. If the magazine indicator shows a red signal then follow the instructions on the next page.

Insert the magazine slide into the magazine with the hinge towards the front of the camera.

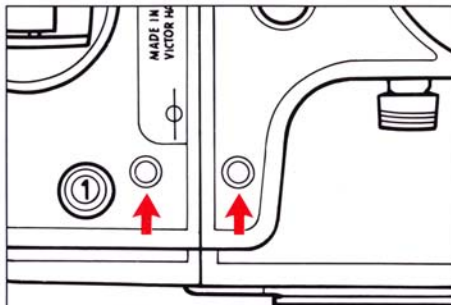
Slide the magazine catch to the right, swing the magazine back and lift it off the lower supports



**NOTE:** The magazine cannot be removed without inserting the magazine slide. The slide protects the film from fogging. Note also that the camera cannot be operated when a magazine, with slide inserted, is attached to the camera.

## Magazine and Camera Indicators

The indicators on the right hand side of the camera and magazine show if the particular unit is ready to operate (white) or if it has been operated (red). The golden rule is, that when you attach a magazine to a camera, the indicator colours should match - white to white, or red to red. There are only two correct combinations. This is how you rematch the indicators.



### Red Magazine - White Camera

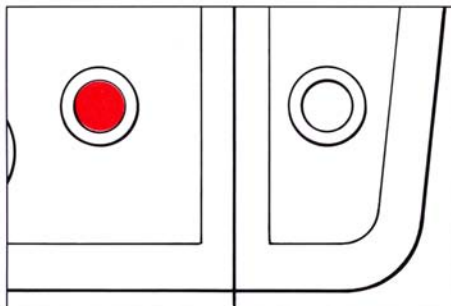
Remove the magazine from the camera.

Operate the camera - its indicator will change to red.

Attach the magazine.

Wind the camera with one full turn of the winding crank.

Both indicators will now display white.

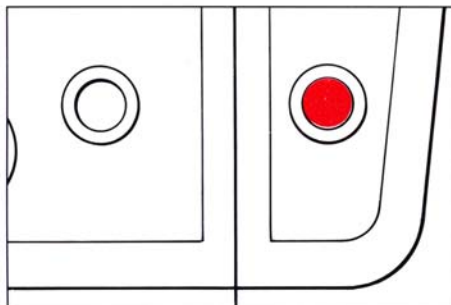


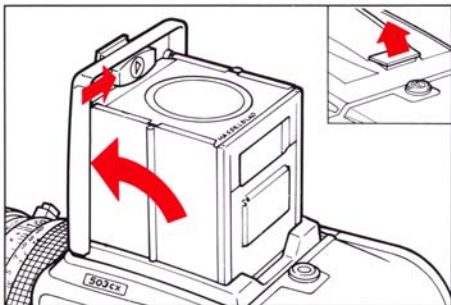
### White magazine - Red Camera

Remove the magazine from the camera.

Wind the camera with one full turn of the winding crank. The camera indicator will change to white.

Replace the magazine. Both indicators will now display white.



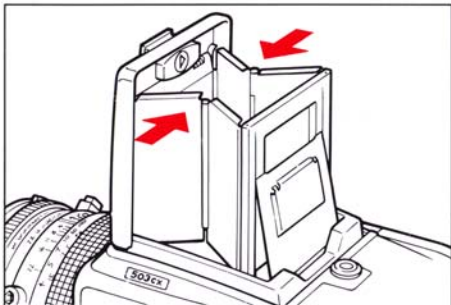


### Opening the Focusing Hood

Lift the lid firmly by the grip at the rear edge, and swing it up to the vertical position.

### The Built-in Magnifier

The magnifier flips up into the viewing position when the oval button inside the lid is moved in the direction of the arrow. To fold the magnifier down simply press it back with a fingertip until it locks into the lid. The magnifier may be changed for a correction lens. See page 21.



### Closing the Focusing Hood

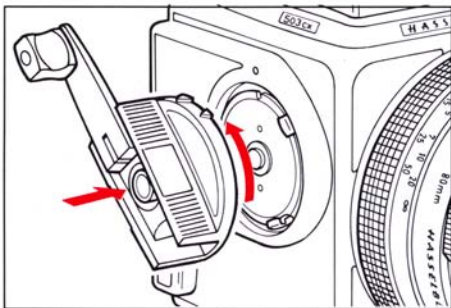
"Pinch" in the side plates at the hinge points, and fold the lid down.

### The Winding Crank

One full revolution of the winding crank winds the camera, cocks the shutter and transports the film one frame.

### Removing the Winding Crank

It is preferable that the camera be fully wound when the crank is being removed or replaced. To remove the crank, you depress the latch button in the center of the winding crank and turn the crank - **counter clockwise**.



### Attaching the Winding Crank

Place the winding crank against the camera's winding crank bayonet with the smaller crank index opposite the camera index. Push in the crank lightly and turn it in a **clockwise** direction until the larger crank index aligns with the camera index and the crank locks on.

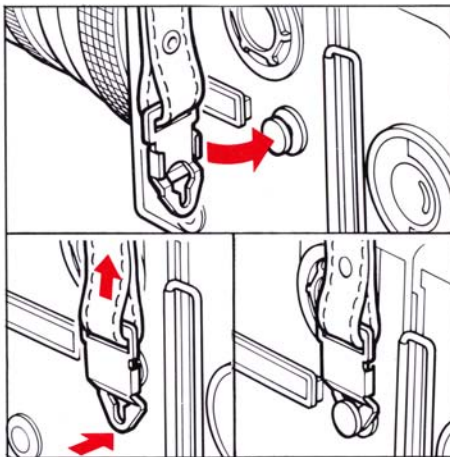
## Strap Lugs

### Strap Attachment

Place the main body of the strap clip over one of the camera's strap lugs. Press down on the tip of the clip and pull back so that the strap lug slips into the opening at the tip of the clip.

### Strap Removal

Lift the clip locking plate and slide the clip forward. The clip will then slide off the strap lug.



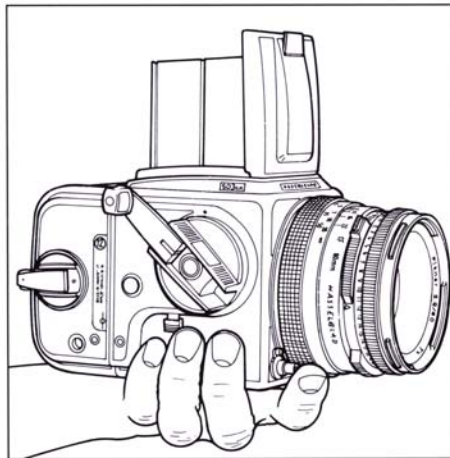
## Left Hand Grip

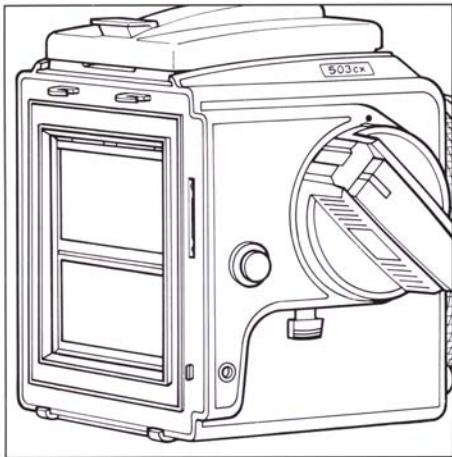
You will find that holding the camera in your left hand with your index finger on the release button, as shown in the illustration, is most convenient when taking photographs. Your right hand is then free for focusing, setting the exposure, rewinding, and changing the lens or magazine.

## Focus and Release

Before you can take a photograph, you must remove the magazine slide. The magazine will then be locked on the camera body, and the camera release button will be unlocked.

Rotate the focusing ring on the lens until you can see a sharp image of the subject in the viewfinder. You can now depress and release the release button to operate the camera.





## Operating Details

### Exposure

As a general rule for all shutter speed settings except B, you should keep the release button depressed until the lens shutter has opened and closed fully. This is especially important at shutter speeds from 1 s to 1 /15s.

If you relax the pressure on the release button too soon, the auxiliary shutter will terminate the exposure prematurely (see page 14, 'Warning Signal').

You can see the auxiliary shutter, which consists of two blinds, covering the rear opening of the camera body.

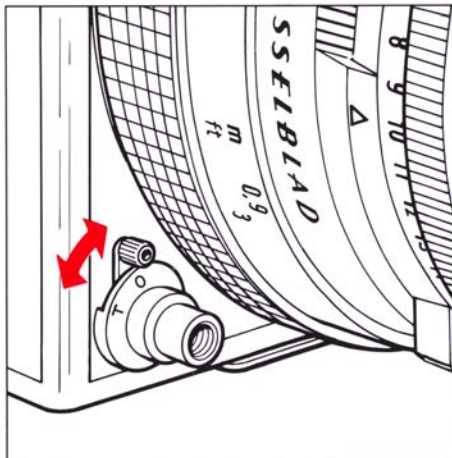
### Time Exposure Lock

The time exposure lock has two settings: 0, where it is disengaged and T, where the depressed release button locks in the depressed position until the lock is returned to the 0 setting.

The winding crank cannot be advanced until the lock is reset to 0 .

You can use the T setting for time exposure when the shutter is set at B.

The time exposure lock cannot be used with a cable release.

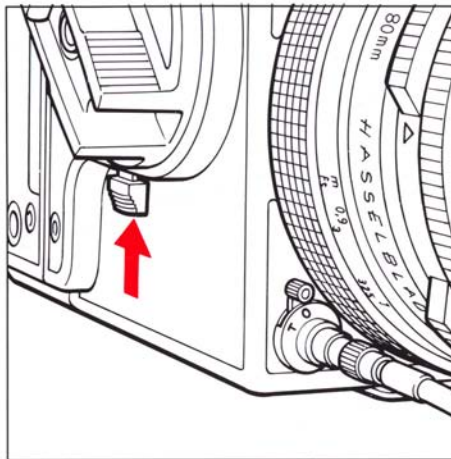


### Pre-release and Cable Release

Considerable efforts have been made to reduce camera vibrations caused by moving parts in the exposure sequence. However, if you wish to avoid these vibrations completely, you can pre-release the mechanism by pushing the pre-release button upwards. This causes the following sequence: the mirror folds up, the shutter closes and remains closed, and the auxiliary shutter opens. When you subsequently press the release button, only the shutter then operates at the preset speed.

As shown in the illustration, you can also attach a cable release to further reduce vibrations.

Since the image on the focusing screen disappears in a pre-released camera, a sports viewfinder is a good way to keep track of moving subjects.

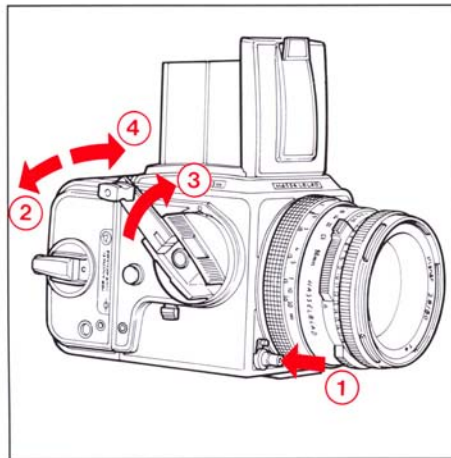


### Double Exposure

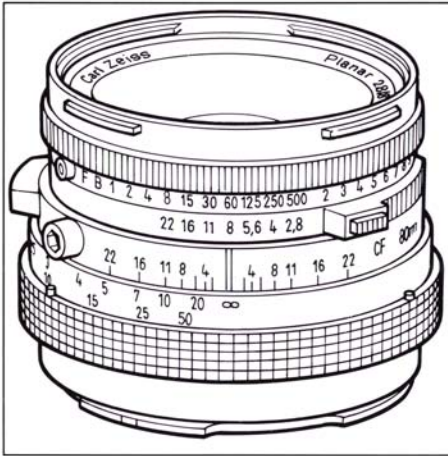
As the camera has been designed to prevent accidental double exposure you will have to carry out the following procedure in order to make multiple exposures on the same frame:

1. Depress the main release button and make the initial exposure.
2. Insert the magazine slide and remove the magazine.
3. Wind the camera with one full revolution of the winding crank.
4. Replace the magazine and remove the slide.

The unit is now ready to make a second exposure on the same frame. You can make additional exposures in the same manner.







## Lens and Shutter Functions

### Shutter Speeds

The shutter speed selector ring is the ring located closest to the front of the lens. The desired shutter speed is set against the central lens index.

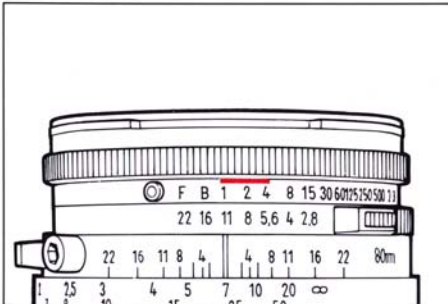
The white scale shows the shutter speeds, and the orange scale the exposure values (EV).

The green F setting is used only when the lens is attached to a Hasselblad camera in the 2000 series with a focal plane shutter. The operation of the diaphragm is not affected. The F setting can only be engaged/disengaged when the green detent button is pressed. When using the 503cx, cxi or 500C/M, the F setting will cause exposure errors since the shutter remains open.

### Aperture

The aperture setting ring is the second closest ring to the front of the lens. The aperture value is also set against the central lens index.

CF lenses have an automatic diaphragm that stops down to the preset working aperture immediately prior to exposure.



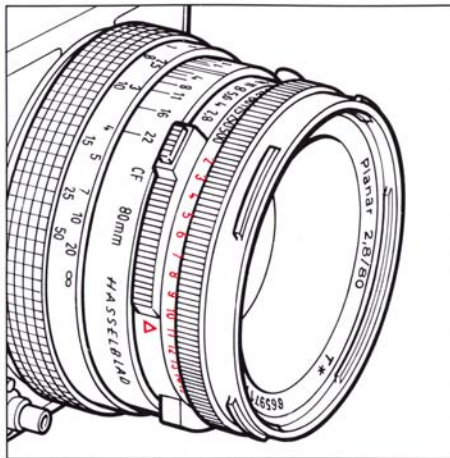
### Warning Signal

On the shutter speed scale you will find a red marking opposite the 1, 1/2, and 1/4s. This is to warn you of possible exposure errors. The auxiliary shutter remains open only as long as you maintain pressure on the release button (see also page 12).



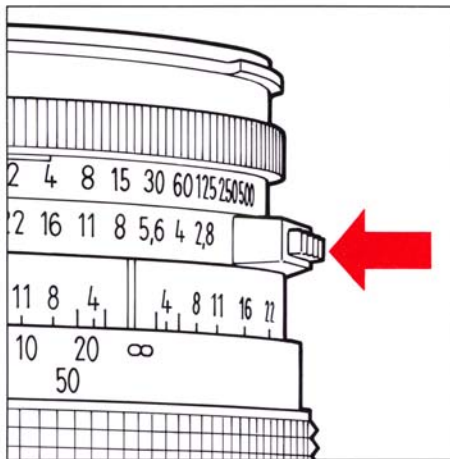
## Exposure Values

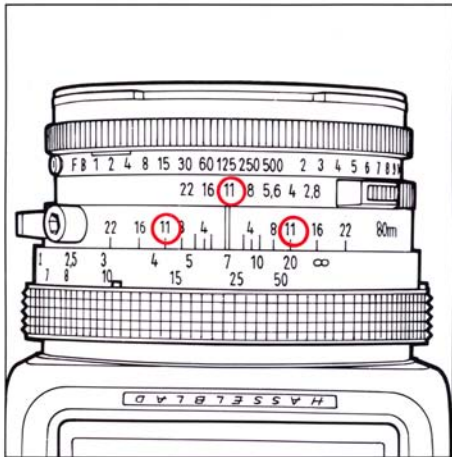
The aperture and shutter speed combination set opposite the central lens index determines the exposure. Every combination of shutter speed/ aperture has an equivalent exposure value (EV) which you can read and set against the red EV index on the side of the lens.



## Interlocked Shutter Speed/ Aperture

If you want to change the shutter speed or aperture without changing the exposure value (EV), you can interlock the speed and aperture setting rings by holding down the interlock button which is on the right of the aperture scale. When interlocked, the rings move together, increasing or decreasing the aperture to compensate for a decrease or increase of speed respectively.





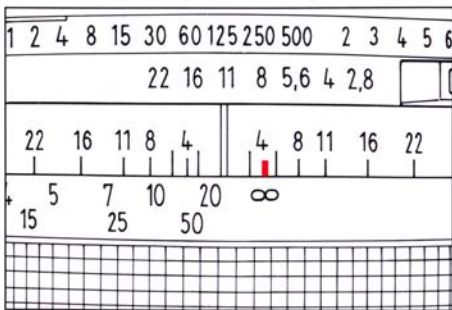
## Focusing and Depth of Field

On the focusing ring are the distance scales and a knurled rubber grip which is closest to the camera body. You focus the lens by rotating the focusing ring until you obtain a sharp image of the subject in the viewfinder.

The distance between the subject and the film plane is read off the focusing ring's distance scale opposite the central lens index. The distance in meters is shown in white numerals, and the distance in feet is in orange numerals.

Objects closer or further away than the selected distance will be sharp, within certain limits. The limits of this field of sharp focus, i.e. depth of field, vary with the aperture.

The depth of field available at any given f/stop can be read off the depth-of-field scale on both sides of the central index. The rings on the illustration indicate how to read the depth of field scale with an aperture of 11



## Infrared Photography

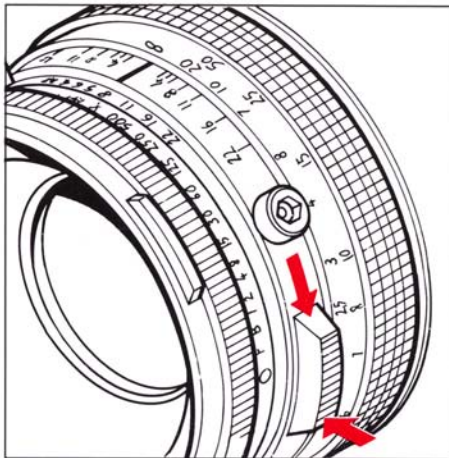
Infrared (IR) rays (wavelengths longer than 800 nanometers) are refracted to a focal plane somewhat behind the focal plane of the visible light images formed on the focusing screen. To compensate for this discrepancy, proceed as follows:

Focus as usual on the focusing screen. Then rotate the focusing ring until the distance set is opposite the red IR index.

### Checking Depth of Field

To allow you to check the depth of field in the image on the focusing screen, the diaphragm can be stopped down to the preset aperture simply by sliding the manual preview button downwards until it locks into the preview position.

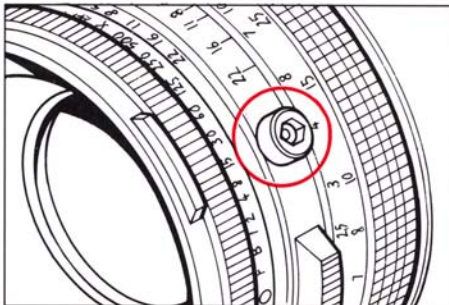
To release the button, and reopen the diaphragm, press in the lower section of the button.



### Flash Synchronization

The Hasselblad 503cx and 500C/M use lenses from the Hasselblad CF series. These lenses have built-in leaf shutters with speeds from 1 to 1/5005. Flash synchronization occurs at full shutter opening via the PC flash terminal.

Electronic flash units can be used at all shutter speeds, 1 - 1/500.

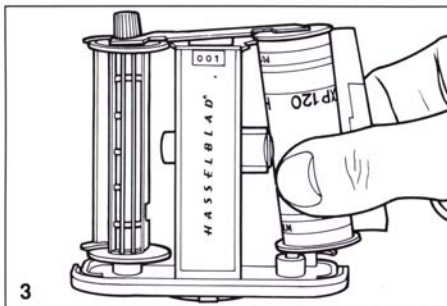
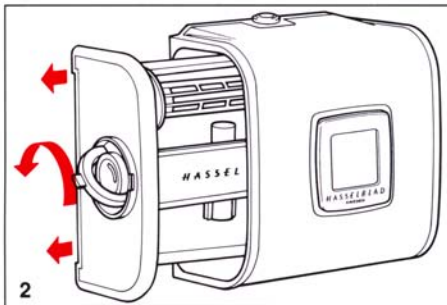
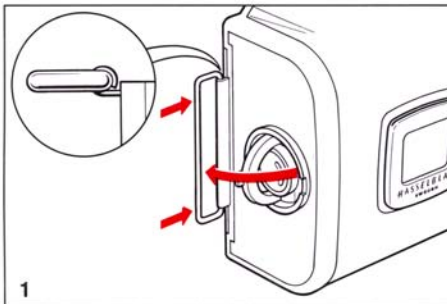


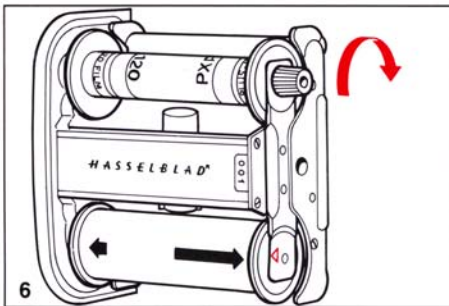
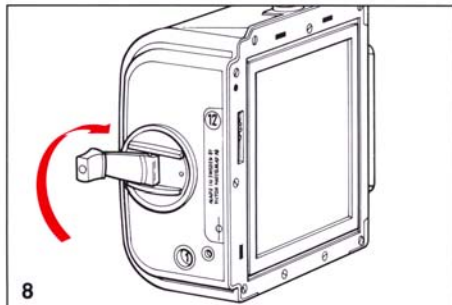
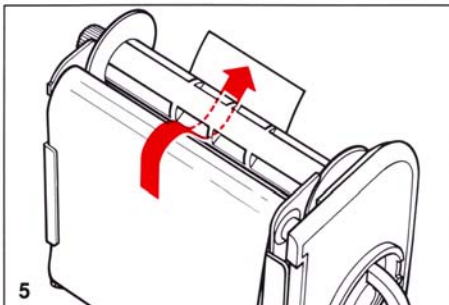
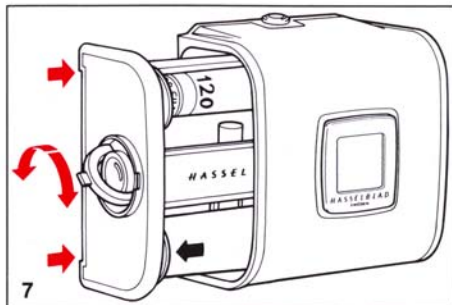
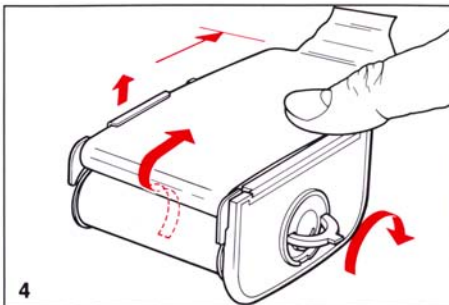
## Magazine Operation

### Loading the Magazine

The magazine may be loaded on, or off the camera. If it is to be loaded off the camera then the magazine slide must be inserted, its flat side towards the rear. This facilitates removal of the film holder for loading. Follow the procedure below.

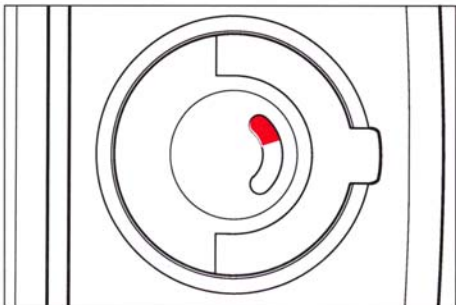
1. Fold out the film holder key.
2. Turn the key **counter-clockwise** and withdraw the film holder.
3. An empty take-up spool should be placed under the splined knob of the spool clamp bar. Insert a roll of film under the other end of the bar, ensuring that it is turned the same way as in the illustration. Be careful to remove all the paper tape that surrounds a new roll of film.
4. Turn the film holder key **clockwise** to open the film clamp. Pull 8 - 10cm (3 - 4 in.) of paper backing off the film roll and slide the edge under the clamp.
5. Insert the tongue of the backing paper into the slot in the take-up spool.
6. Turn the splined knob **clockwise** until the arrow on the paper backing is opposite the triangular index on the spool clamp bar, but no further.
7. Turn the film holder key **counter-clockwise** and insert the film holder into the magazine - jiggling it a little if it does not click into place. Lock the film holder into the magazine by turning the key **clockwise**.
8. Fold out the film crank and rotate it **clockwise** about ten turns until it stops. Turn the crank counter-clockwise and fold it in.





Number 1 will now be displayed in the frame counter window and the magazine is loaded - ready for use. The magazine's film winder crank is only blocked at frame 1. A partially exposed film may be wound off at any frame thereafter.

The frame counter is automatically reset when the film holder is withdrawn from the magazine.



### Magazine Load Status

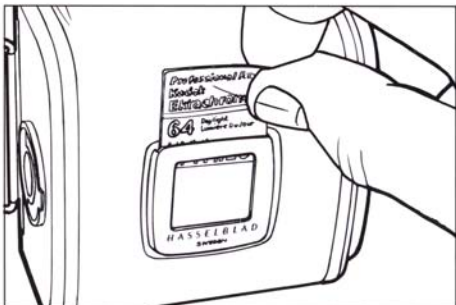
In the center of the film holder key there is a crescent-shaped indicator window that shows white when the magazine is freshly loaded. It gradually changes to red as the film is wound through. An all red indicator shows that the film is used up or that the magazine is empty.

### Removing Film from the Magazine

When the last frame has been exposed and wound on, the magazine is blocking the camera for further release.

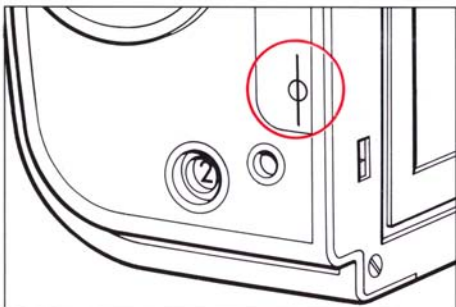
Wind off the film by folding out the film winding crank, and rotating it clockwise until you can feel the film leaving the supply spool.

You can now withdraw the film holder from the magazine and remove the exposed film.



### Film Tab Holder

The end tab of the film pack can be inserted in the holder on the back of the magazine as a reminder of the kind of film that has been loaded into the magazine.



### Film Plane Index

The film plane index on the right hand side of the magazine body indicates the position of the film plane to facilitate accurate determination of the film-to-subject distance, which is very important in close-up photography.

## Viewfinder System

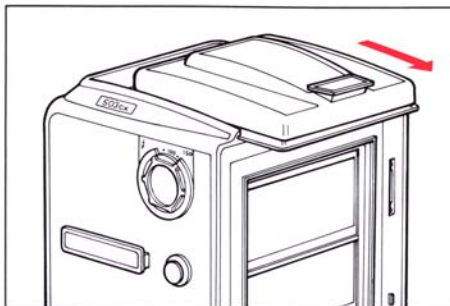
### Changing the Viewfinder

The film magazine or rear cover must be detached before the focusing hood or other viewfinder can be removed. The focusing hood should be folded down before being removed, to prevent it from being damaged.

Remove the hood by sliding it to the rear in its guide slots.

Slide the replacement finder into the slots and push it forward .

Attach a magazine or rear cover to the camera.



### Changing the Magnifier

The focusing hood has an easily interchangeable magnifier that allows you to match the viewfinder with your eyesight.

Lenses with diopter correction from +3 to -4 are available , and are easily interchanged as follows:

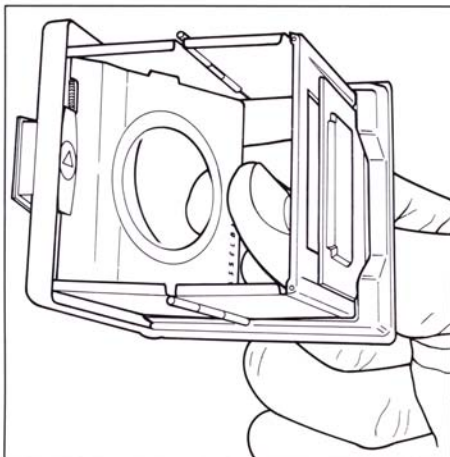
Remove the focusing hood from the camera and open it by lifting the lid firmly at the rear edge.

Bring the magnifier to the viewing position by moving the oval button in the direction of the arrow.

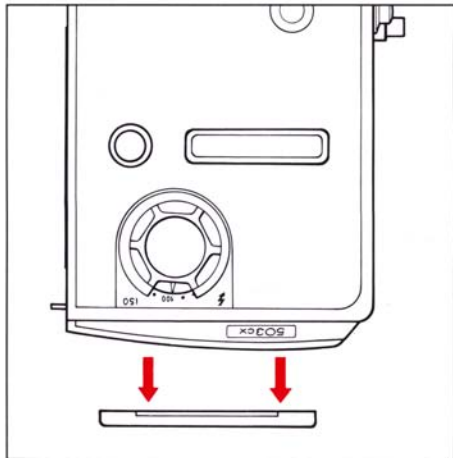
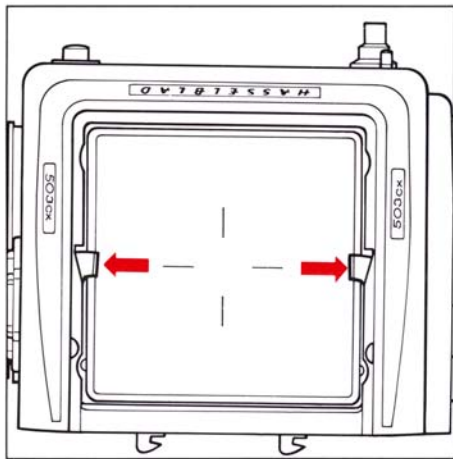
Push the magnifier half way back down to its folded position.

Grip the lower edge of the magnifier between thumb and forefinger (through the underside of the hood), and pull firmly.

Insertion of the replacement lens is the reverse of the above procedure .







## Changing the Focusing Screen

The screen is easily interchanged without the requirement of special tools.

Detach the magazine and viewfinder.

Slide the screen latches to the side. Cup your hand over the screen, and invert the camera.

The screen will now drop into your hand.

Insert the replacement screen, ensuring that the smooth flat side of the frame is uppermost, and that all four corners are seated on the support pins.

It is not necessary to return the screen latches. This is done automatically when the viewfinder is replaced.

In the Hasselblad Product Catalog you will find the entire range of focusing screens of different designs for various applications.

The 503CX and CXi models are equipped with an Acute-Matte focusing screen which provides a considerable increase in the brightness of the focusing image when compared with the focusing screens used in the 500 Classic model. On page 24 you will find instructions on how to adjust the PME and PME3 / PME5 Meter Prism Viewfinders to compensate for the light level differences on the different focusing screens.



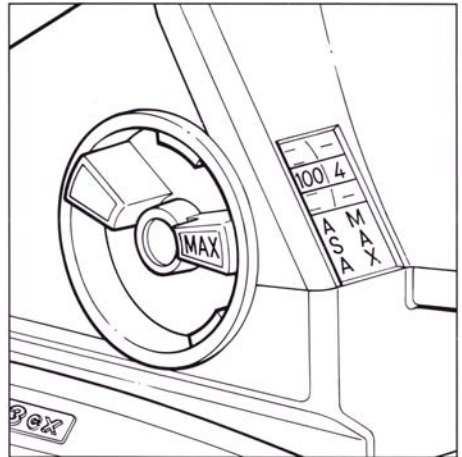
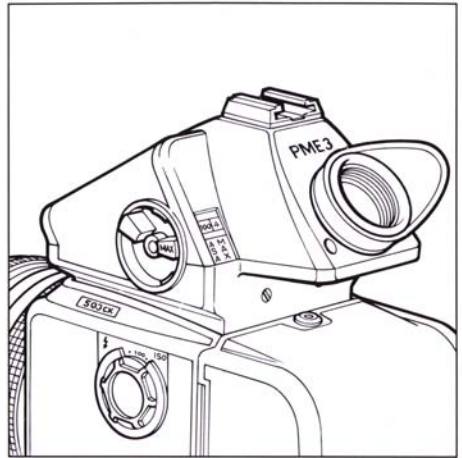
## PME and PME3 / PMES Meter Prism Viewfinder Adjustments

Since the Hasselblad Meter Prism Viewfinders measure the light level on the focusing screen they have been calibrated at the factory to give an accurate reading with one particular type of screen. If that focusing screen is replaced with another type which gives a different light level under the same ambient conditions, the meter has to be adjusted to compensate for the difference.

The PME and PME3/ PME5 meter viewfinders are basically the same design but are differently adjusted from the factory. The PME3 / PME5 type is adjusted to the brighter Acute-Matte screen in the 503CX or CXi camera while the previous PME type is adjusted to the lower light level of the Ground glass screen (Cat. No. 42161) and similar, comparable screens, such as Split image (42188), Microprism and split image (42218) , or Grid and microprism (42250) which is used in the 500 Classic. The Plain glass screen (42200) is not suitable for TTL metering.

The distinction between the two viewfinder types is indicated by the designation PME3 or PME5 respectively on the rear of the viewfinder body above the eyepiece. The PM E has no designation.

The ways of compensating for alternative usage of the meter viewfinders are shown in the charts on the next page .



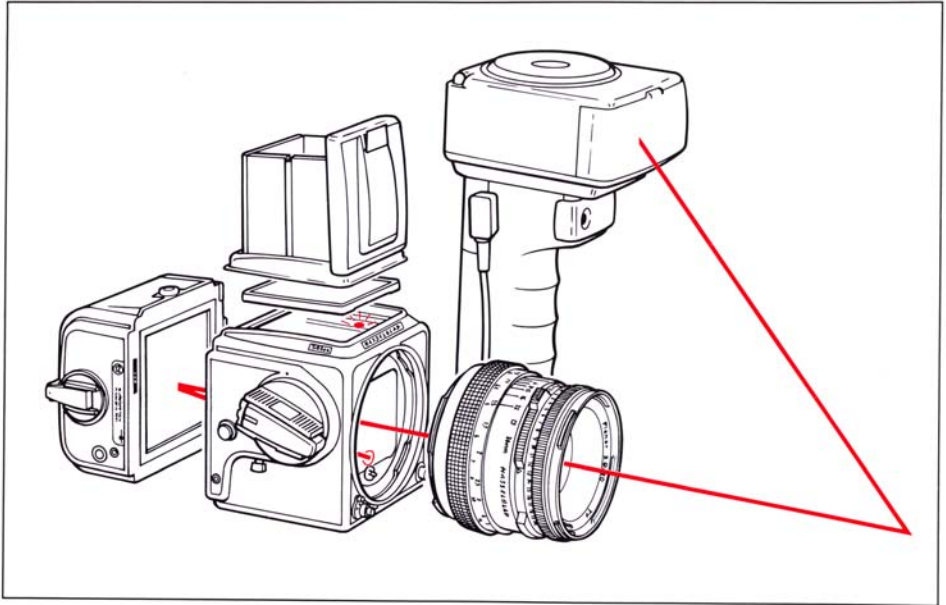
A. Acute-Matte<sup>1</sup> focusing screen, combined with:

<b>Viewfinder model</b>	<b>Action required to obtain a correct EV value</b>
PME3/PME5	No action required.
PME	<p><u>Reduce</u> the ASA/ISO setting to half the film speed value as indicated on the film package or <u>Increase</u> the MAX lens aperture setting one full step or <u>Reduce</u> the EV reading one full step when setting it on the lens EV scale.</p>

B. Ground-glass or similar focusing screen, combined with:

<b>Viewfinder model</b>	<b>Action required to obtain a correct EV value</b>
PME3/PME5	<p><u>Increase</u> the ASA/ISO setting to twice the film speed value as indicated on the film package or <u>Reduce</u> the MAX lens aperture setting one full step or <u>Increase</u> the EV reading one full step when setting it on the lens EV scale.</p>
PME	No action required.

<sup>1</sup> Acute-Matte designed by MINOLTA .



### Automatic Flash Control

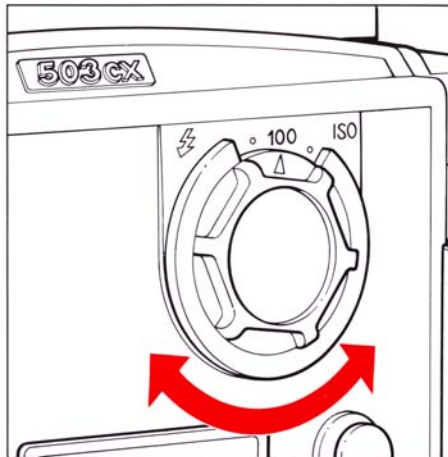
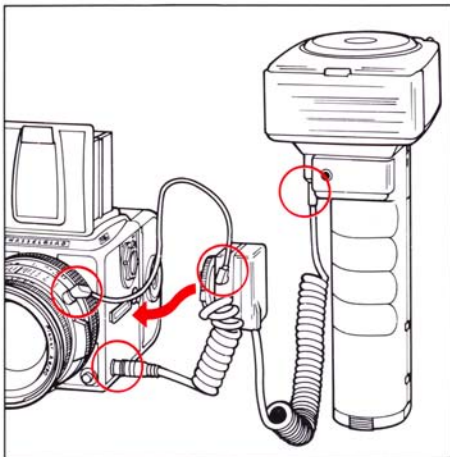
The camera's built-in flash sensor and electronics meter the light reflected from the central portion of the film surface, a circle with a diameter of 40 mm. The metering system is connected to a selector for setting film speed. With the Hasselblad Profflash 4504 directly connected or any other System SCA 300 or 500 dedicated flash unit connected through the Hasselblad flash adapters SCA390 or 590 it controls the flash unit and cuts off the flash when the exposure is correct.

For connecting the Hasselblad Profflash 4504 to the 503CX, please refer to the instruction manual for the flash unit.

Under the left hand edge of the focusing screen an indicator light shows when the flash is ready to be operated and also confirms if the flash output was sufficient to give a correct exposure.

The flash unit powers the camera's electronics and also the flash adapter, when that is used.

## 503CX and CXi only



### Attaching the Hasselblad Flash Adapters SCA 390 and SCA 590

For hand-held flash units, either adapter is attached as shown in the illustration above:

- the 6-pole contact from the spiral cord is connected to the camera's side socket
- the sync cord is connected from the adapter to the PC flash terminal of the lens
- the connecting cord is attached to the handheld unit.

### Setting the Film Speed

The film speed is set via the ISO selector. This is divided into ISO/ASA settings from 16 - 1000. The equivalent in DIN ratings can be found using the table below. Certain films require compensation for differences in reflection. In these instances, the compensation is made by changing the film speed selector setting. The amount of compensation has to be determined by experiment.

**NOTE:** The flash unit must always be set to the "TTL" position.

ISO/ASA	16	25	40	64	100	200	400	800											
DIN	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

## Viewfinder Signal

This indicator located under the left edge of the focusing screen displays two different signals, both shown in a red glowing light. The indicator is only in operation when the camera is used with flash adapters SCA 390 or 590 and a flash unit that conforms to the corresponding System SCA 300 or 500.



## Ready Signal

A steady red light indicates that the flash unit is charged and ready to be fired.

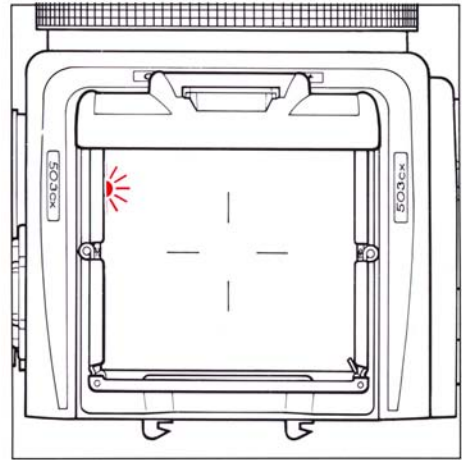


## Result Signal

A blinking red light that occurs for just over a second after exposure indicates that the flash has emitted the right amount of light for a correct exposure. After the blinking signal, the indicator returns to the ready signal when the flash unit is once again fully recharged.

## No Result Signal

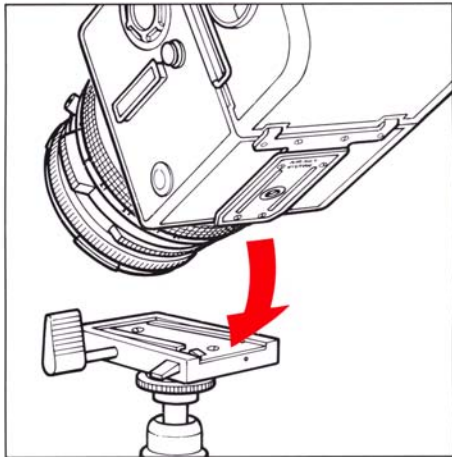
This indicates that the flash emitted was not sufficient for correct exposure. The aperture must then be opened or the flash distance to the subject must be reduced. Changing to a faster film is also a possibility.



The Ready Signal will appear after a short but variable length of time depending on the condition of the batteries.

Please refer to your flash unit's operating instructions for more information about other functions when using automatic flash light metering that conforms to System SCA flash photography with flash sensors, or with non-automatic flash units.

## Accessories



If you own tripods and other accessories with 3/8 in screws we recommend you to purchase the Tripod Quick-coupling which has both 1/4 and 3/8 in sockets and provides an easily operated, fast and reliable tripod connection.

Should you prefer not to obtain a Quick-coupling, your Hasselblad distributor can, upon request provide a replacement 3/8 in socket together with installation instructions.

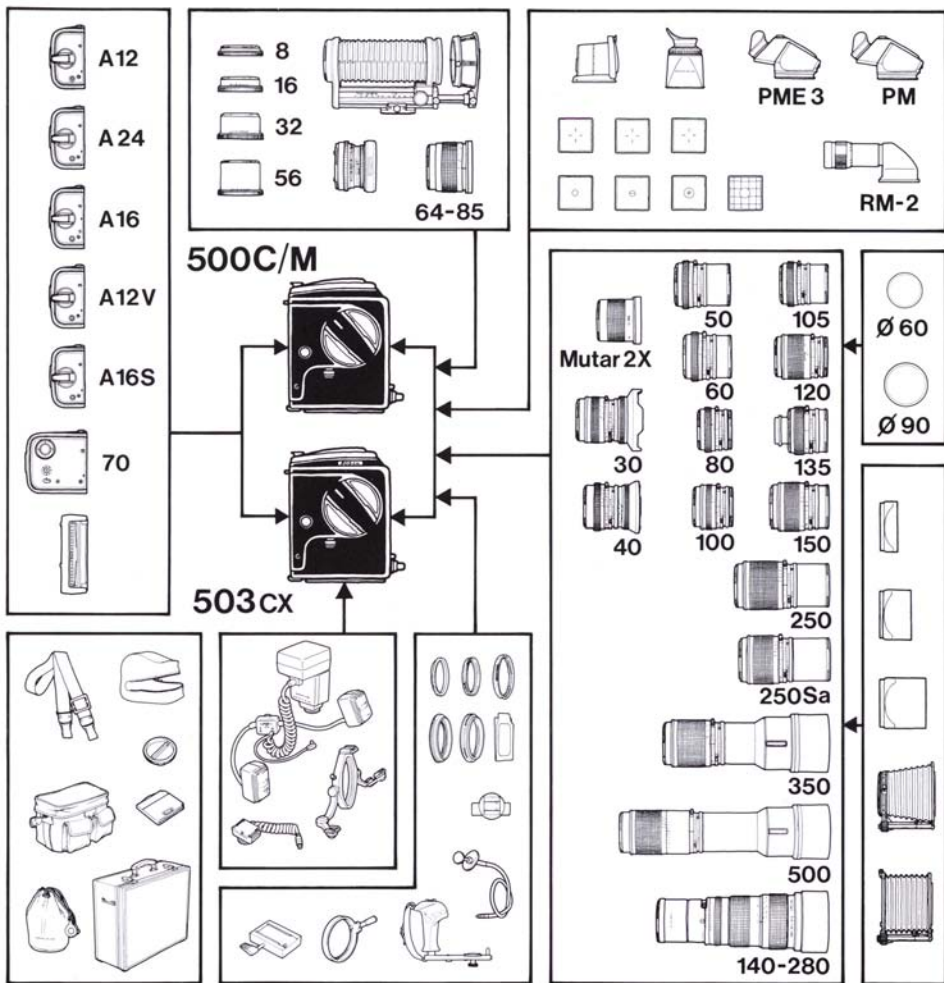
On the left hand side of the camera body in front of the strap lug there is an accessory rail for the Hasselblad Sports Viewfinder and other accessories. The lenses accept filters and lens shades on the front bayonets.

### Accessory Mounts

On the bottom of the camera body a 1/4 in thread tripod socket is located in the centre of the quick coupling plate. The plate and socket accept flash gun brackets and the plate also fits and easily locks into the Hasselblad Tripod Quick-coupling.

### Hasselblad Accessory Chart

The accessory chart on the opposite page indicates the wide range of accessories available within the Hasselblad System. Please refer to the Hasselblad Product Catalogue for complete information on the entire Hasselblad Camera System.



# Technical Specifications and Equipment 503CX

<b>Camera type:</b>	Single lens reflex camera with 6x 6 cm (2 1/4 x 2 1/4 in) max. film size. Interchangeable lenses, film magazines, viewfinders, and focusing screens.
<b>Design:</b>	Mechanical, with an aluminum alloy camera body shell cast in one piece.
<b>Viewfinders:</b>	Folding focusing hood interchangeable with reflex viewfinder, prism viewfinders with or without built-in light meter, or magnifying hood.
<b>Film advance:</b>	Manual advance with simultaneous shutter cocking. The winding crank can be replaced with a knob with built-in light meter.
<b>Flash control:</b>	TTL/OTF-metering. ISO 16-1000 with Hasselblad Prof flash 4504 or flash adapters SCA390 or SCA590 for connection with flash units from the SCA 300 or SCA 500 systems resp. Metering area within Ø40 mm in the center of the image area.
<b>Tripod socket:</b>	1/4 in socket thread and base plate for quick coupling attachment.
<b>External dimensions:</b>	Camera body only-see page 32. Camera body with Planar CF 80 mm lens and film magazine A12:180 L x 114 W x 107 H (7 x 4 1/2 x 4 3/16 in).
<b>Weight:</b>	Camera body only : 610g (1 lb 5 1/3 oz). Camera body with Planar CF 80 mm lens and film magazine A 12: 1510g (3 lb 5 1/3 oz).
<b>Focusing screen:</b>	Hasselblad Acute-matte <sup>1</sup> focusing screen.  <i>The camera body (chrome model, cat. no. 10026; black model cat. no. 101 72) comes with focusing hood, focusing screen, winding crank, standard strap, and front and rear protective covers.</i>

For comprehensive information on accessories please refer to the Hasselblad Product Catalog.

Hasselblad reserve the right to make changes in the published specifications without prior notice.

<sup>1</sup> Acute-Matte designed by MINOLTA



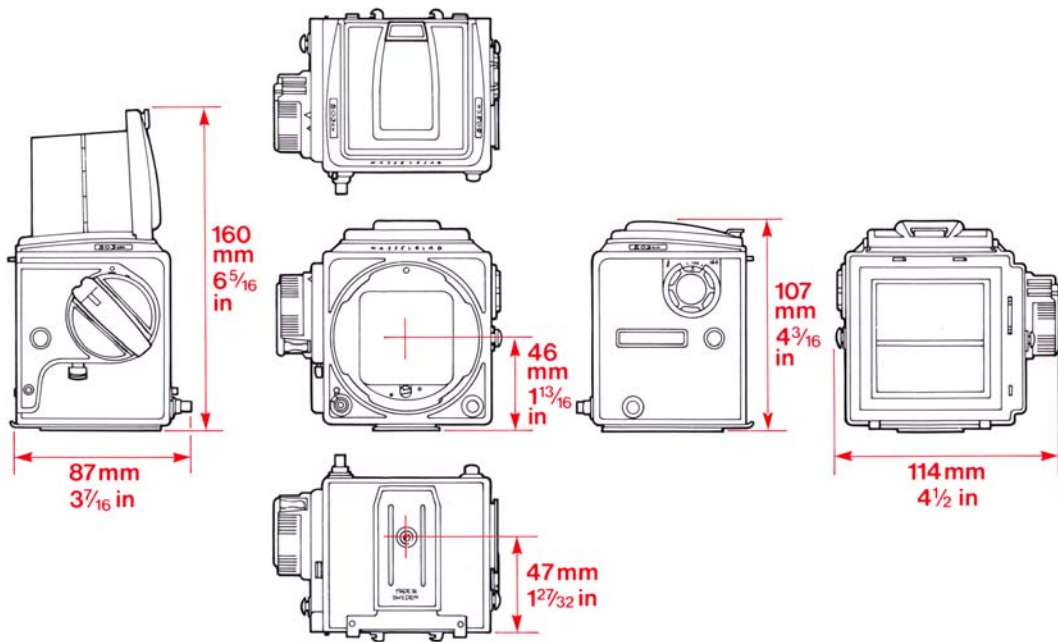
# Technical Specifications and Equipment 503 Classic

<b>Camera type:</b>	Single lens reflex camera with 6x 6 cm (2 1/4 x 2 1/4 in) max. film size. Interchangeable lenses, film magazines, viewfinders, and focusing screens.
<b>Design:</b>	Mechanical, with an aluminum alloy camera body shell cast in one piece.
<b>Viewfinders:</b>	Folding focusing hood interchangeable with reflex viewfinder, prism viewfinders with or without built-in light meter, or magnifying hood.
<b>Film advance:</b>	Manual advance with simultaneous shutter cocking. The winding crank can be replaced with a knob with built-in light meter.
<b>Tripod Socket:</b>	1/4 in socket thread and base plate for quick coupling attachment.
<b>External dimensions:</b>	Camera body only-see page 32. Camera body with Planar CF 80 mm lens and film magazine A12:180 L x 114 W x 107 H (7 x 4 1/2 x 4 3/16 in).
<b>Weight:</b>	Camera body only : 600g (1 lb 5 oz). Camera body with Planar CF 80 mm lens and film magazine A 12: 1500g (3 lb 5 oz).
<b>Focusing screen:</b>	Hasselblad Grid and microprism (alt. Ground -glass ) focusing screen.
<b>Lens:</b>	Hasselblad Zeiss Planar CF 2,8/80 mm, interchangeable.
<b>Magazine:</b>	Hasselblad A 12 interchangeable film magazine, 12 exposures on 120 type film
	<i>The camera body (chrome model, cat. no. 10022; black model cat. no. 10170) comes with focusing hood, focusing screen, winding crank, standard strap, and front and rear protective covers. The 500 Classic outfit also includes Planar CF 80 mm lens (cat. no. 20029) with lens cap, and film magazine A 12 (chrome finish cat. no. 30074; black finish cat. no. 30147)</i>

For comprehensive information on accessories please refer to the Hasselblad Product Catalog.

Hasselblad reserve the right to make changes in the published specifications without prior notice.

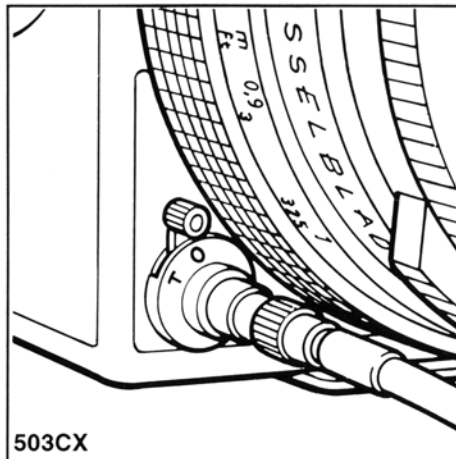
## Camera Body Dimensions



## 503CXi

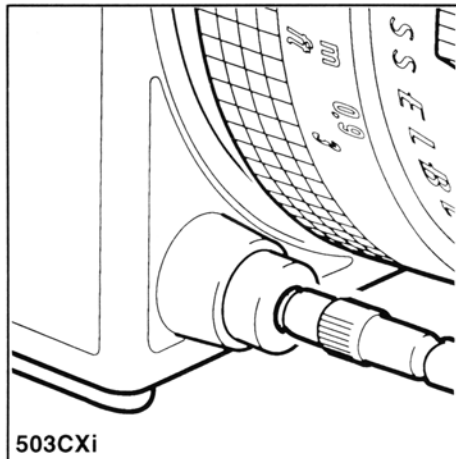
### New Features

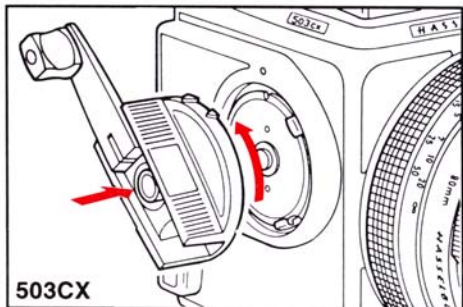
The following describes the new features of the 503 CXi camera.



### Exposure Button

The new Exposure Button is enlarged and has a rounded front for convenient operation. The Time Catch of the previous 503 CX camera has been removed.

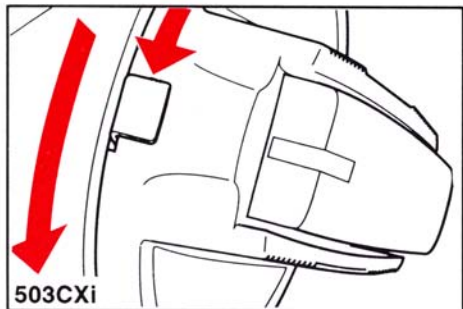




## Winding Crank

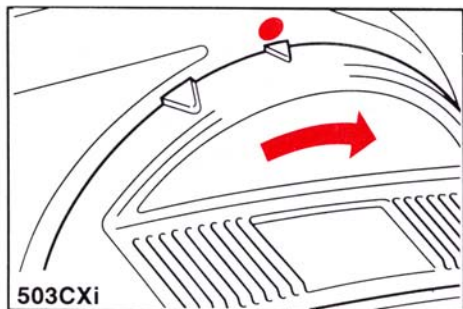
The 503CXi is equipped with an upgraded winding crank to enable the use of the Winder CW.

The winding crank of 503CX and earlier cameras is attached and removed as described on page 10.



## Removing the Winding Crank

Push the catch lever downwards while rotating the crank **counter-clockwise**. Then pull the crank straight out from the shaft.



## Attaching the Winding Crank

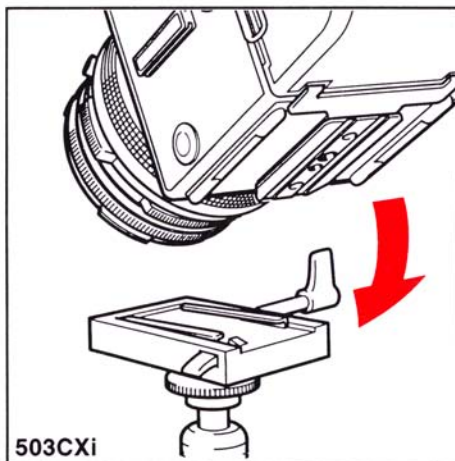
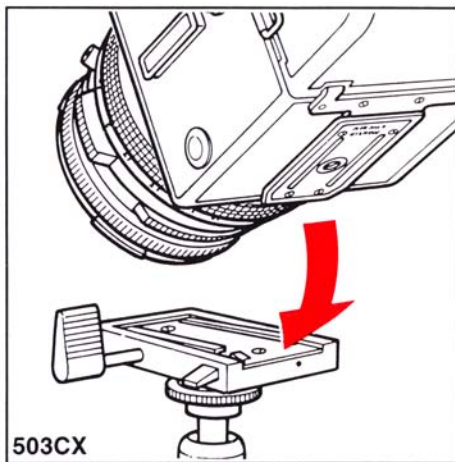
Attach the crank to the shaft, aligning the smaller triangular index mark against the red dot just above the mount. Keep the crank pushed against the camera while turning it **clockwise** until the larger triangular mark is aligned with the red dot.

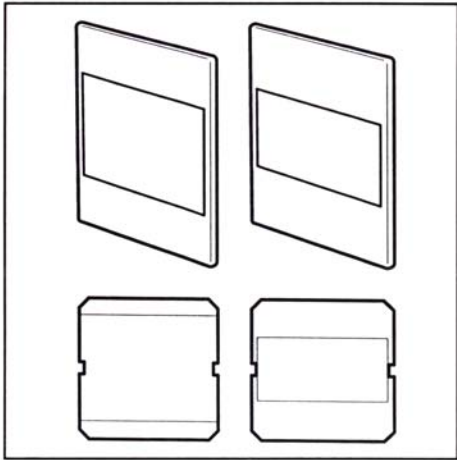
## Tripod Mount

The new Tripod Mount Plate features both 1/4 in and 3/8 in threads as well as two rotational locking holes. It is compatible with the Tripod Quick Coupling 45130.

## Rubber Feet

The 503CXi is equipped with rubber feet to prevent the camera from slipping and damaging delicate surfaces.





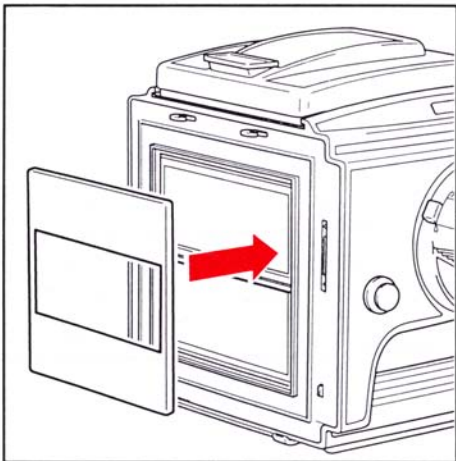
### Format Masks

The body's rear plate has an accurately machined mount that accepts the 6 x 4,5 and 6 x 3 panoramic format masks.

To install a mask, push it in place in the mount. The masks can be used horizontally or vertically.

Each format mask has a corresponding viewfinder mask which is placed over the focusing screen.

**NOTE:** Do not forget to install the corresponding viewfinder mask and align according to mask orientation.



# Troubleshooting

Your camera is built to give long and trouble-free service. If however you encounter any operating difficulties because you are not familiar with the Hasselblad camera system, the following table may help to resolve them.

PROBLEM	POSSIBLE CAUSE	REMEDY
You cannot operate the release button	The magazine slide is still in place The film is finished The camera is in the released position	Remove the slide Load a new film Wind the camera
The release button remains depressed	The time exposure lock is in the T-position	Return the lock to the O-position
There is no image on the focusing screen	The camera is in the pre-released or released position.	Release and/or wind the camera
You cannot remove the front protective cover	The camera is in the pre-released or released position.	Release and/or wind the camera
You cannot attach the lens	The camera is in the pre-released or released position. The lens shutter is in the released position	Release and/or wind the camera
You cannot remove the lens	The camera is in the pre-released or released position.	Release and/or wind the camera
You cannot remove the magazine	The magazine slide is not fully inserted	Insert the magazine slide until it is positively stopped

# Camera Care, Service and Guarantee

## Camera Care

Your Hasselblad camera is designed to withstand the rigors of professional use in most environments. In order to avoid the possibility of damage however, the camera should be protected from the following.

**Extremes of temperature.** High temperatures can have an adverse effect on both the film and the camera. For this reason you should not keep your camera in places where it will get hot, such as in direct sunlight or on a shelf above a radiator. Frequent rapid and severe temperature changes can cause problems such as the corrosion of electrical contacts, and should therefore be avoided.

**Dust and grit.** You should take care to prevent dirt of any kind from getting into your camera. When taking photographs in coastal areas for example, the camera should be protected from sand and salt water spray.

You can blow away any dust on the lens glass, magnifier or focusing screen, or wipe it off gently with a soft cloth if necessary. Smears on the lens glass should be removed with a high quality lens cleaning solution on a tissue. Be careful not to scratch the lens or touch any of the glass surfaces with your fingers. The surface of the mirror is coated and can be blown clean but should not be wiped.

**Impact.** Your camera can be damaged by severe physical shocks. While you will obviously try not to drop it, you should also take care not to leave it where it can fall or be knocked to the ground, or roll about, as on the back seat of a car for example.

## Service

Faultless camera performance is essential to the professional photographer. It is therefore advisable to check that your camera is functioning correctly before an important assignment. You should also return your camera to a Hasselblad service center for occasional checking and preventive maintenance. If your camera is used constantly and intensively, exposing for example hundreds of rolls of film per week, check-ups every six months are recommended. Hasselblad service centers have the expert staff and specialized equipment necessary to ensure that your camera remains in perfect working order.

## Guarantee

Provided that you bought your camera from an authorized Hasselblad outlet, it is covered by an international guarantee for one year. The guarantee document and a registration card are supplied with the camera. Keep the guarantee document carefully, but fill in the registration card and return it to your Hasselblad distributor.



## Notes

**VICTOR HASSELBLAD AKTIEBOLAG**  
Box 220, S-401 23 Göteborg, Sweden