

# *H A S S E L B L A D*

## **501CM**



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*Instruction Manual, Gebrauchsanweisung, Brugsanvisning, Manual de Instrucciones, Manuel d'Instructions,  
Manuale d'Istruzioni, Gebruiksaanwijzing, Manual de Instruções, Bruksanvisning, Käyttöohjekirja*

# Hasselblad 501CM

## - a cornerstone of the system

Thank you for choosing Hasselblad equipment and welcome to the family. You have just entered a partnership with the best and most comprehensive medium-format photographic system in the world. You undoubtedly considered many aspects before making your final choice of camera and we would like to congratulate you on making a very wise decision! Hasselblad cameras provide a sound investment for your future in photography. Rest assured that you can rely on the standards and service that has made the name of Hasselblad a benchmark in the medium-format. Hasselblad is the choice of the world's leading photographer, the very name being synonymous with reliability, design and image quality. This winning combination has carried the Hasselblad name beyond the ends of the earth and into space.

The 501CM is a robust professional member of the Hasselblad team. Simple to use, battery independent, and fully compatible with the Hasselblad system. It features the sophisticated GMS (Gliding Mirror System) which provides a full viewfinder image with virtually all Hasselblad lenses. Basically a 6x6 cm camera, it also accepts masks for the 6x4.5 cm or panoramic 6x3 cm formats without changing film magazines. The bright image is further enhanced by the new improved focusing screen from the brilliant "Acute-Matte D" range. Altogether, a winning combination for professional or dedicated amateur use.

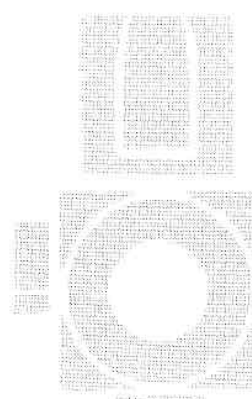
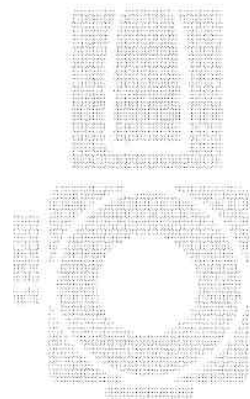
The 501CM also provides the key to the extensive Hasselblad System. The complete range of accessories – the most comprehensive medium format assortment in the world – is also at your disposal. The 501CM

provides access to almost the whole range of Hasselblad lenses both old and new. Lenses are specially manufactured for Hasselblad by Carl Zeiss of Germany – the indisputable leader in camera optics. The accessory range allows you to extend your photographic potential even further providing an almost limitless flexibility for superb images whatever your field. The Hasselblad System features interchangeability of 17 different lenses, 1.4x and 2x teleconverters, magazines for different image format and films including Polaroid® type films, viewfinders with or without exposure metering capabilities, a number of focusing screens and a variety of accessories to suit your special requirements.

This instruction manual describes in detail how to operate you 501CM, so please read it carefully. If you have a query do not hesitate to contact your dealer – we want you to be 100% satisfied! Your dealer can also provide you with the latest in news and technical development from Hasselblad. A quarterly magazine – FORUM – is published with the emphasis on photographic imagery featuring photographers from all over the world to provide you with inspiration! Our internet site <http://www.hasselblad.com> – is a source of general and technical information and you can e-mail us – [info@hasselblad.se](mailto:info@hasselblad.se) – for further inquiries.

Your new 501CM provides access to the Hasselblad potential. The realization of this potential is only dependant upon your skill, care and judgement as a photographer.

**Congratulations on a fine choice!**



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The Hasselblad 501CM is available in chrome or black trim and supplied as a separate body or as a kit comprising camera body, lens and film magazine.

<b>501CM camera body, chrome</b>	<b>10238</b>
<i>Supplied with the following equipment:</i>	
Focusing hood, chrome	42315
Focusing screen Acute Matte D*	42204
Standard strap	59110
Front protective cover	51438
Rear cover MultiControl	51070
<b>501CM camera body, black</b>	<b>10240</b>
<i>Supplied as 10238 above,</i>	
<i>but equipped with black Focusing hood</i>	<b>42323</b>
<b>501CM standard kit, chrome</b>	<b>11051</b>
<i>Complete camera comprising:</i>	
501CM camera body, chrome	10238
Zeiss Planar CB 2.8/80 mm	20032
A12-6x6 magazine, chrome	30212
<b>501CM standard kit, black</b>	<b>11054</b>
<i>Complete camera comprising:</i>	
501CM camera body, black	10240
Zeiss Planar CB 2.8/80 mm	20032
A12 magazine, black	30213

\*Acute-Matte D designed by MINOLTA

## Parts & Components

1. Focusing hood	<b>10238</b>
2. Focusing screen: Acute-Matte D *	
3. Screen retaining clip	
4. Focusing ring and scale	
5. Shutter speed and aperture interlock button	
6. Central lens index	
7. Depth-of-field scale	
8. Aperture ring and scale	
9. Shutter speed selector ring	
10. PC flash terminal	
11. External and internal lens accessory mount	
12. Exposure value scale	
13. Exposure value index	
14. Lens release button	
15. Drive shaft	
16. Threaded cable release socket	
17. Shutter release button	
18. Viewfinder mirror	
19. Winding crank	
20. Pre-release button	
21. Winding crank index	
22. Strap lug	
23. Magazine status indicator	
24. Frame counter	
25. Film winding crank	

- 1. Magazine driving gear
- 2. Name plate
- 3. Magazine catch
- 4. Magazine slide
- 5. Film load indicator
- 6. Film holder key
- 7. Magazine slide holder
- 8. Film tab holder
- 9. Magazine support slots
- 10. Magazine supports
- 11. Tripod threads, 1/4" & 3/8"
- 12. Quick-coupling plate
- 13. Camera supports
- 14. Lens drive shaft
- 15. Depth-of-field preview knob
- 16. Lens locating index
- 17. Accessory rail
- 18. Strap lug
- 19. Auxiliary shutter
- 20. Magazine hook
- 21. Focusing hood magnifier

*In the text, positions of components and orientation are described in relation to the camera as seen when taking a photograph, i.e. the lens at the front, the viewfinder on the top and the winding crank on the right hand side.*

*The appropriate illustrations are indicated by the figures beside the small headings in the text.*


## Getting Started

*This section describes how to prepare your camera for use as well as the basic operations. Follow the instructions step-by-step to avoid damaging the equipment.*

*Check that the winding crank on the right hand side of the camera is locked thus ensuring that the camera is fully wound. If the crank is not locked, rotate it clockwise until it stops, thereby winding the camera.*

### Front protective cover 3

Turn the cover (bayonet fitting), in the direction of the arrow in the illustration, and lift it out. To avoid leaving the camera body unprotected, do not remove the cover until you are ready to attach a lens.

 *The front protective cover can only be removed when the camera is fully wound.*

### Rear cover MultiControl 4

Depress the catch, tilt the cover backwards, and lift it off. To avoid leaving the camera body unprotected, do not remove the cover until you are ready to attach a magazine. Always replace the cover to protect the auxiliary shutter when storing the camera body without a magazine attached.


See later section on the vignette checking facility of the Rear cover MultiControl.

### Attaching the lens 5, 6

Make sure that both camera and lens are fully wound. The illustration shows the correct relationship between the drive shaft, the lens drive coupling and their indexes. If the lens is not wound, you can insert a coin in the coupling slot and rotate it clockwise until it locks (about 4/5 of a turn). 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 7

Depress the lens release button and rotate the lens counter-clockwise until it stops and lift it out of the mount.

 *You can only remove the lens when the camera is fully wound and not in the pre-released mode (see 'Pre-release and cable release').*

### Attaching the magazine 8, 9, 10

Ensure that the magazine slide is fully inserted with the grip towards the front of the camera (see detail in fig. 8) and that the magazine status indicator is white. If the indicator is red then see 'The magazine status indicator'. It is also advisable to have the camera fully wound.

Rest the magazine on the magazine supports making sure that they are properly engaged in the recesses on the underside of the magazine. Carefully swing the magazine towards the camera body (1) and check that the camera's upper support hooks fit into the slots in the magazine.


Push the magazine gently but firmly against the hood while sliding the magazine catch button to the right (2). Release the button when the magazine has made contact with the camera body, and then push the button to the left (3) to ensure that it has reached the locked position. Remove the slide to positively lock the magazine to the camera body (4). The camera is now ready to use.


### Magazine slide holder 11

The slide can be stored in the slide holder on the back of the magazine. Insert it, with the grip facing the rear of the magazine, folding the grip into place over the protrusions.

### Removing the magazine

Just as when attaching the magazine, it is advisable to have the camera fully wound and the magazine indicator displaying white. Insert the magazine slide fully with the grip towards the front of the camera. Slide the magazine catch to the right, swing the magazine back and lift it from the lower supports.


 *The magazine cannot be removed without first inserting the magazine slide.*


 *Note also that the camera cannot be operated when a magazine, with slide inserted, is attached to the camera.*

### The magazine status indicator 1

The status indicator on the right hand side of the magazine shows white when the magazine is ready to operate and red when the film has not been advanced after

posure. If the status indicator shows red, release the camera first (by pressing the shutter release button), attach the magazine, and wind the camera again. This will automatically advance the film to the next frame.

 **Do not attach a magazine showing white to a camera that is not rewound! Wind the camera first or you will lose a frame.**

 **Do not attach a magazine showing red to a fully wound camera! This could result in a double exposure.**

## Opening the focusing hood 12

Firmly grip the rear edge of the tab on the focusing hood and pull upwards. The hood unfolds automatically and locks in the open position.

## Using the built-in magnifier 13

The magnifier flips up into the viewing position when the oval button inside the lid is moved to the right, as in the illustration.

To fold the magnifier down simply press it back down towards the lid until it locks into place.

The magnifier can easily be exchanged to suit individual eyesight (see 'Changing the magnifier').

## Using the focusing screen and viewfinder image 14

The 501CM is fitted with an Acute-Matte D focusing screen that provides exceptional brightness and resolution. The centre of the screen is indicated by a hairline cross.

The focusing screen can easily be exchanged for others specially designed for various applications (see 'Changing the focusing screen').

## Closing the focusing hood 14

Firstly, fold away the magnifier by pressing it back down towards the lid until it locks into place. 'Pinch' in the side plates at the hinge points and then push the lid lightly backwards towards the rear of the camera. The hood then automatically folds back down.

## Strap attachment 15

Place the main body of the strap clip over one of the camera's strap lugs. Press the tip of the clip towards the camera while pulling back on the strap so that the clip slides over the lug and locks into position.

## Removing the strap 16

Lift the clip locking plate high enough to be able to pass over the camera lug. Slide the clip in the direction away from the strap until it is free.

## Left hand grip 17

You may find that holding the camera in your left hand is the most convenient grip; operating the exposure release button with your index finger. Your right hand is then free for focusing, setting the exposure, rewinding, and changing the lens or magazine.

## Exposure release 18

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.

After exposure, the viewfinder remains dark until you have rewound the camera by one full turn of the crank, which also advances the film.

# Magazine Operation

*Hasselblad film magazines provide the opportunity to vary format, length and type of film used. They can be quickly and easily switched mid-film without any film-frame loss.*

*Operation of the magazines is not difficult but please pay particular attention to the section on loading. Go through the procedure one step at a time and practice a little until you feel confident. Note especially which way round the spool of film is placed and the positioning of the backing paper under the clamp bar.*

*The film is automatically advanced frame-by-frame in the magazine by the camera winding mechanism and consequently only when attached to the camera body. Therefore when separated, the magazine and camera body could become unmatched. This can be determined by checking the magazine status indicator or by the winding crank status.*

*Try to adopt a routine that suits you regarding winding and removal as well as checking on the status of each item. This will ensure that the camera- / lens- / magazine-combination status is always fully operative.*

## Parts & components 18

1. Magazine slide
2. Film load indicator
3. Film holder key
4. Magazine slide holder
5. Film tab holder
6. Film winder crank
7. Frame counter
8. Film advance indicator
9. Film take-up spool
10. Grooved take-up knob
11. Film clamp
12. Film holder number
13. Spool clamp bar
14. Film supply spool
15. Film load index

## Loading the magazine

The magazine can be loaded on, or off the camera. If it is to be loaded off the camera, then the magazine slide must be inserted first.

In either case, when inserting the slide ensure that its film side is towards the rear (see detail in illustration) as this facilitates the removal of the film holder.

## Step-by-step film loading 19-26

Follow the procedure below in the correct order.

**cw** = clockwise

**c-cw** = counter-clockwise

**19** Fold out the film holder key.

Turn the key c-cw and withdraw the film holder (magazine insert).

Place an empty take-up spool under the grooved take-up knob of the spool clamp bar. Insert a roll of film under the other end of the bar, turned the same way as in the illustration. Be sure to remove all of the paper band surrounding a new roll of film.

Turn the film holder key cw to open the film clamp. Pull 8–10 cm (3–4 in.) of paper backing off the film roll and slide the edge under the clamp.

Insert the tongue of the backing paper into the slot in the film take-up spool.

Turn the grooved take-up knob cw until the arrow on the paper backing is aligned opposite the triangular film load index on the spool clamp bar, but no further.

Turn the film holder key c-cw and insert the film holder into the magazine. Ensure that it is correctly positioned. Turn the film holder key cw to lock the film holder in the magazine and then fold the key back into place.

Fold out the film winder crank and rotate it cw about ten turns until it stops. Then turn it c-cw and fold it in. The figure (1) will now be displayed in the automatic frame-counter window indicating that the magazine is loaded and ready for use.

The magazine's film winding crank is only blocked at time 1. A partially exposed film may be wound off at any frame afterwards.

Do not put the film holder down on an unclean surface or where it can attract dust.

- Clean out the magazine housing regularly removing not only dust and particles but also any scraps of paper from previous rolls that may have remained inside.

- Each magazine housing and film holder form a carefully matched pair. Be careful, therefore, when loading more than one magazine at a time not to switch housings and holders. The last three figures of the housing serial number should correspond with the serial number on the film holder.

- Load and unload the magazine away from direct light sources.

### Magazine load status

In the centre 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 either 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 blocks the camera for further release.

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

Again, preferably away from direct light sources, withdraw the film holder from the magazine and remove the exposed film.

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

### 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.

### Installing format masks

The body's rear plate accepts the 6 x 4.5 cm and 6 x 3 cm (panoramic) format masks.

To install a mask, push it in place in the mount, with the printed side facing you, as in the illustration. The masks can be used horizontally or vertically.

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



Do not forget to install the corresponding viewfinder mask and align according to format mask orientation.

### Film plane position

In close-up photography the film-to-subject distance can be an important factor when determining an accurate focus setting.

The red line in the illustration marks the location on the film magazines that coincides with the film plane position.

## CB Lens and Shutter Functions

CB lenses are the conventional choice for the 501CM and are therefore mentioned and illustrated in detail here.

However, CF/CFE lenses are also compatible with the 501CM. They are mentioned separately. Please see the appropriate instruction manuals for more details.

### Parts and components

The illustration shows the Planar CB 2.8/80 mm lens, but the layout of the parts is identical on all CB lenses.

1. External and internal bayonet mount
2. Shutter speed ring
3. Warning mark
4. Shutter speed scale
5. Depth-of-field preview knob
6. PC flash terminal with safe lock
7. Focusing ring
8. Lens bayonet plate with red index
9. Exposure value (EV) scale
10. Shutter speed/aperture interlock button
11. Aperture ring and scale
12. Depth-of-field scale
13. Central index

- 1. Infrared focusing index
- 2. Focusing distance scale

### Shutter speed and aperture

The shutter speed selector ring is the ring located closest to the front of the lens. To set the speed, turn the ring until the desired shutter speed position is aligned with the central lens index.

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. CB lenses have an automatic diaphragm that stops down to the preset working aperture at the start of the exposure sequence.

### 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 1s to 1/4s, as the auxiliary shutter remains open only when the button is kept pressed (see also 'warning mark' below).

You can see the auxiliary shutter, consisting of two blinds, covering the rear opening of the camera body. It protects the film from unwanted exposure as the lens' shutter is normally open for focusing.

### Warning mark

There is a mark on the shutter speed scale above the 1s, 1/2s, and 1/4s settings. This is to warn you of possible exposure errors as detailed above. The auxiliary shutter will terminate the exposure prematurely if you relax the pressure on the button too soon.

Listen to the buzzing sound of the delay escapement in the lens' shutter and maintain the pressure on the release button until the sound stops.

### Exposure values

The combination of aperture and shutter speed settings aligned with the central index determine the exposure. Every combination of shutter speed/aperture has an equivalent exposure value (EV) which you can read and set against the triangular EV index on the right hand side of the lens.

### Interlocked shutter speed / aperture

If you want to change the shutter speed or aperture while still keeping the same shutter speed/aperture combination (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

The focusing ring is the wide ring with a knurled rubber grip set closest to the camera body. It has engraved distance scales in both feet and metres. Focus the lens by rotating the focusing ring until you obtain a sharp image of the subject in the viewfinder or by aligning the chosen distance against the central index if you prefer.

You can make an estimation of film plane/subject distance for manual flash estimation, for instance, by focusing on the subject through the viewfinder and then reading off the focusing scale.

Objects closer or further away than the selected distance may also be rendered sharp, within specific limits. The limits of this field of sharp focus, i.e. the depth of field, vary according to the aperture size and focus setting.

The depth of field available at any given f/stop can be read off the focusing ring opposite the appropriate marks on the depth-of-field scale on both sides of the central index. As an example, the illustration indicates how to read the depth of field scale at an aperture of f/11 and a focus setting of ca. 7 m (ca. 23ft); this combination would provide a zone of acceptable sharpness stretching from ca. 4.3m (ca. 14ft) to ca. 20 m (ca. 66ft).

### Depth-of-field preview

Depth-of-field can be visually checked on the focusing screen. Fig. (a) shows the normal viewing position for the depth-of-field preview knob (lens opened to the largest aperture regardless of aperture setting). Slide the knob in the direction of the arrow until it clicks into the new position. The lens aperture is now stopped down in accordance with the aperture ring setting.

Fig. (b) illustrates that by pressing the lower part of the knob it will return to its normal position.

### 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:

1. the mirror folds up
2. the shutter closes and remains closed

3. the diaphragm closes to its preset aperture
4. the auxiliary shutter opens

Do not forget there will now be no visible image in the viewfinder!

Subsequent pressing of the release button will operate the lens shutter only, at the preset speed, completing the exposure sequence.

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

### Multiple exposure

As the camera has been designed to prevent accidental double or multiple 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 camera is now ready to make another exposure on the same frame. Additional exposures may also be made on the same frame by repeating the procedure.

### PC flash terminal with safe lock

Flash synchronization occurs at full shutter opening via the PC flash terminal. Suitable electronic flash units can be used at all shutter speeds from 1s to 1/500s as well as B. When inserting a flash cord into the terminal, keep the lock button pressed in. On release, the cord will be locked into place. To remove, press in the lock button again.

## Infrared photography

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Infrared (IR) rays (wavelengths longer than 800 nm) form an image on a plane further away from the lens than the image plane for visible light. To compensate for this difference you have to align the chosen distance against the IR index and not the normal central index. Proceed as follows:

Focus as usual on the focusing screen.

Note the distance on the focusing scale that is opposite the central index line.

Now rotate the focusing ring to set this distance opposite the red IR index line instead of the central index line.

The illustration shows a lens focused at the infinity setting for infrared film.

## CF and CFE lenses

*CF and CFE lenses are basically identical in operation to the CB lenses. CF lenses have a slightly different appearance and also feature slightly different depth-of-field buttons and flash sync terminal operation. Please refer to the relevant instruction manuals for further detailed operational and technical information about these lenses.*

*The main difference, however, is the additional 'F' setting. This is used only when the lens is attached to a Hasselblad camera in the 200 or 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 lever is pressed, but please note:*



*If the F setting is used with the 501CM, exposure errors will occur since the shutter remains open.*

## The Viewfinder System

*The 501CM is supplied with a light, compact and foldable viewfinder, providing a through-the-lens laterally reversed image. It is easily interchangeable with alternative viewfinders including the prism finders, which produce a laterally corrected image.*

*The focusing hood on the standard viewfinder has a built-in 4.5x magnifier for accurate focusing and this can easily be changed to suit individual eyesight.*

*The 501CM is equipped with an Acute-Matte D focusing screen which produces an exceptionally bright and sharp image. While this covers most needs, the Hasselblad system offers a range of alternative screens for various specific applications.*

*Each item is easily and quickly interchangeable without the need for special tools or facilities.*

### Changing the focusing hood or viewfinder

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To remove the focusing hood so as to attach any other viewfinder in the Hasselblad system, proceed as follows:

1. Detach the magazine.
2. Fold down the focusing hood to protect it from damage and remove it by sliding it to the rear in its guide slots.

3. Slide the replacement viewfinder into the slots and push it forward until it stops.

When fully inserted the viewfinder is retained in position by a spring-loaded catch until you have reattached the magazine.

### Changing the magnifier

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Mounted lenses with dioptric correction from +3 to -6 are available, and are easily interchanged as follows:

1. Remove the focusing hood from the camera and open it by lifting the lid.
2. Release the magnifier by pushing the catch to the right.
3. Push the magnifier halfway back down to its folded position.
4. Grip the lower edge of the magnifier plate (through the underside of the hood), and pull firmly.
5. Keep the plate holder halfway down and insert the replacement lens plate with the printed side up. Fold the hood down and replace on the camera.


### Changing the focusing screen


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1. Detach the magazine and viewfinder.
2. Push the two screen clips to the side into the recesses.
3. Place your hand over the screen, and invert the camera. The screen will now drop into your hand.
4. Insert the replacement screen, ensuring that the smooth flat side is uppermost and the sharp-edge corners down. Ensure that all four corners of the screen are positively seated on their supports.

1 need not return the screen latches. This is done automatically when the viewfinder is replaced.

ould the screen refuse to drop out by itself, ensure that : camera is fully wound, remove the lens and check it the mirror is in the down position. Put a finger ough the lens mount and push gently on the screen m underneath, preferably with a soft cloth between : screen and the finger.

 Do not immerse the screen in water, or use any kind of cleaning fluid.

 Do not use hot air to dry the screen if it becomes damp.

### **ME / PME3 / PME5 / PME51 / PME90 eter Prism Viewfinder adjustment**

e Hasselblad Meter Prism Viewfinders measure the ht level on the focusing screen. They are calibrated at : factory to give an accurate reading with one particu-type of screen. If that focusing screen is replaced with other type which provides a different light level under : same ambient conditions, the meter has to be adjust-to compensate for the difference.

wards the end of this manual you will find instruc-ns on how to adjust the PME/PME3/PME5 ME51/PME90 Meter Prism Viewfinders to compen-e for the light level differences with the different fos-ing screens.

ase refer to your viewfinder's operating instructions further information about other functions.

## **Accessories**

*Virtually all accessories included in the present Hasselblad Product Catalogue can be used with the 501CM (when not specifically stated otherwise), except the FE-type lenses and most discontinued older accessories.*

*Fig. 49 shows the wide range of accessories available from the Hasselblad System. They provide you with the opportunity to custom build your outfit to suit exactly your personal requirements.*

*The range includes magazines for various film types and formats, including Polaroid® type films. A selection of Acute-Matte D focusing screens for specific purposes. Various reflex viewfinders, focusing hoods and prism finders, with and without TTL metering. There are 17 lenses to choose from as well as their accessories such as converters, extension rings and bellows, filters and lens shades.*

*Please refer to the Hasselblad Product Catalogue for complete information.*

### **Accessory mounts**

The coupling plate on the bottom of the camera body has both a 1/4 in. and a 3/8 in. tripod thread to suit standard mount fitting screws. It also fits the useful and reliable Hasselblad Tripod quick-coupling S, for added convenience.

The fronts of the lenses have external and internal bayo-

net mounts for filters, close-up lenses and lens shades, while other close-up accessories can be attached between the lens and the camera body.

On the left hand side of the camera body is the accessory rail for the spirit level and the adjustable flash shoe.

### **Vignetting Control Facility**

**47**

The Rear cover MultiControl (supplied) has a vignetting control facility in the form of four holes, positioned at each corner of the frame.

Vignetting can be caused by incorrectly positioned or adjusted accessories such as lens shades, filter holders, etc. It can also occur when shifting the lens as with the PC-Mutar 1.4X Shift Converter, for example.

As a quick and efficient check against such an occurrence, proceed as follows:

1. Set up the camera and compose picture.
2. Remove the magazine/focusing screen adapter.
3. Replace with the Rear cover MultiControl.
4. Depress the depth-of-field button on the lens so that the lens stops down to the working aperture.
5. Open the shutter set at 'B'.
6. Look through each hole in the Rear cover MultiControl in the direction of the lens and compare what you can see with the illustrations.
7. If vignetting is occurring, experiment to find whether it is the degree of shift applied and/or an accessory that is causing the problem.

### **Illustrations:**

- a. The aperture is fully open. No vignetting will occur.
- b. The lens has been stopped down to the working aper-

ture producing the ideal situation. No vignetting w occur.

- c. The lens has been stopped down to the working aperture but vignetting is starting to occur. However th amount is acceptable for a vignette free result.
- d. The lens has been stopped down to the working aperture and more than 50% has been covered. Vignetti will occur and will produce a visible result.

## Action required when combining prism meter viewfinders with Acute-Matte D focusing screens

	PME3 PME5 PME51	PME	Integral Metering PME90	Spot Metering PME90
<b>Acute-Matte D</b> 42204 42207 42210 42213	No restrictions	The exposure should be <b>increased</b> by one EV value.*  <i>Note: 1.4X and 2X converters require test exposures.</i>	No restrictions	The exposure should be <b>reduced</b> by one EV value when using lens/teleconverter combinations which reduce the effective aperture to f/8 or smaller.
<b>Acute-Matte D</b> 42215 42217 42219	No restrictions	The exposure should be <b>increased</b> by one EV value.*  <i>Note: 1.4X and 2X converters require test exposures.</i>	No restrictions	No restrictions within the f/2 - f/5.6 range.  <i>Note: Not recommended for lenses or lens/converter combinations where the maximum effective aperture is smaller than f/5.6</i>

The easiest way to **increase** the exposure by one EV value is to **reduce** the ASA /ISO setting to **half the film speed** as indicated on the film package, e.g. 400 ASA film is set at 200 ASA, 100 ASA film is set at 50 ASA, etc.

**reduce** the exposure by one EV value, **increase** the ASA /ISO setting to **double the film speed** value as indicated on the film package, e.g. 400 ASA film is set at 800 ASA, 100 ASA film is set at 200 ASA, etc.

## Troubleshooting

Your camera is built to give long and trouble-free service, especially when you follow the maintenance and care advice. 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
<b>You cannot operate the exposure release button</b>	<ul style="list-style-type: none"> <li>The magazine slide is still in place</li> <li>The film is finished</li> <li>The camera is not rewound</li> </ul>	<ul style="list-style-type: none"> <li>Remove the magazine slide completely</li> <li>Load a new film</li> <li>Wind the camera</li> </ul>
<b>There is no image on the focusing screen</b>	<ul style="list-style-type: none"> <li>The camera is in the pre-released or released position</li> <li>The lens cap is still in place</li> </ul>	<ul style="list-style-type: none"> <li>Complete the camera release and rewind the camera</li> <li>Remove the lens cap</li> </ul>
<b>You cannot remove the front protective cover</b>	<ul style="list-style-type: none"> <li>The camera is in the pre-released or released position</li> </ul>	<ul style="list-style-type: none"> <li>Complete the camera release and rewind the camera</li> </ul>
<b>You cannot attach the lens</b>	<ul style="list-style-type: none"> <li>The lens is in the released position</li> <li>The camera body is in the pre-released or released position</li> </ul>	<ul style="list-style-type: none"> <li>Wind the lens</li> <li>Complete the camera release and rewind the camera</li> </ul>
<b>You cannot remove the lens</b>	<ul style="list-style-type: none"> <li>The camera body is in the pre-released or released position</li> </ul>	<ul style="list-style-type: none"> <li>Complete the camera release and rewind the camera</li> </ul>
<b>You cannot remove the magazine</b>	<ul style="list-style-type: none"> <li>The magazine slide is not fully inserted</li> </ul>	<ul style="list-style-type: none"> <li>Push the magazine slide until it positively stops</li> </ul>

## Technical Specifications and Equipment – 501CM

<b>Camera type:</b>	Single lens reflex camera with 6 x 6 cm (2 1/4 x 2 1/4") 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 and magnifier interchangeable with reflex viewfinder, prism viewfinders with or without built-in light meter, or magnifying hood.
<b>Film advance:</b>	Manual advance. Simultaneous shutter winding.
<b>Tripod coupling:</b>	1/4 " and 3/8 " socket threads and base plate for Quick-coupling attachment.
<b>External dimensions:</b>	Camera body only - see fig 48. Camera body with Planar C 2.8/80 mm lens, film magazine A12 and focusing hood: 180mm L x 114mm W x 110mm H (7x4 1/2 x 4 1/8").
<b>Weight:</b>	Camera body only: 600g (1.3 lb). Camera body with Planar C 2.8/80 mm lens and film magazine A12 : 1500g (3.3 lb).
<b>Focusing screen:</b>	Hasselblad Acute-Matte D* focusing screen

\*Acute-Matte D designed by MINOLTA

## Equipment Care, Service and Guarantee

### EQUIPMENT CARE

The 501CM is designed to withstand the rigours of professional use in most environments. In order to avoid the possibility of damage however, it should be protected from the following:

**Extremes of temperature.** High temperatures can have an adverse effect on both film and equipment. Try to avoid frequent and severe temperature changes. Be particularly careful in humid environments. Allow the equipment to acclimatize before disassembly. Try to ensure the storage conditions in such environments are as dry as possible.

**Dust and grit.** You should take care to prevent dust and grit from getting into your equipment. In coastal areas take measures to protect your equipment from sand and salt water spray. Dust on the lens glass and focusing screen can be removed with a blower brush or very soft lens brush if necessary. Smears on the lens glass should be treated with great caution. In some cases they may be removed with a high quality lens cleaning solution on a tissue but be careful not to scratch the lens or touch any of the glass surfaces with your fingers. If in any doubt, do not attempt to clean lens glass surfaces yourself but allow a "Hasselblad Authorized Service Center" to treat them.

**Impact.** Your equipment can be damaged by severe physical shocks so practical protective

precautions should be taken. When not in use try to make a habit of storing your camera equipment in some form of protective case bag to avoid accidental damage.

**Loss.** Hasselblad equipment is much sought after and you should take obvious steps to prevent theft. Never leave it visible in an unattended car, for example. Separate and specific camera insurance cover should be considered by professional users.

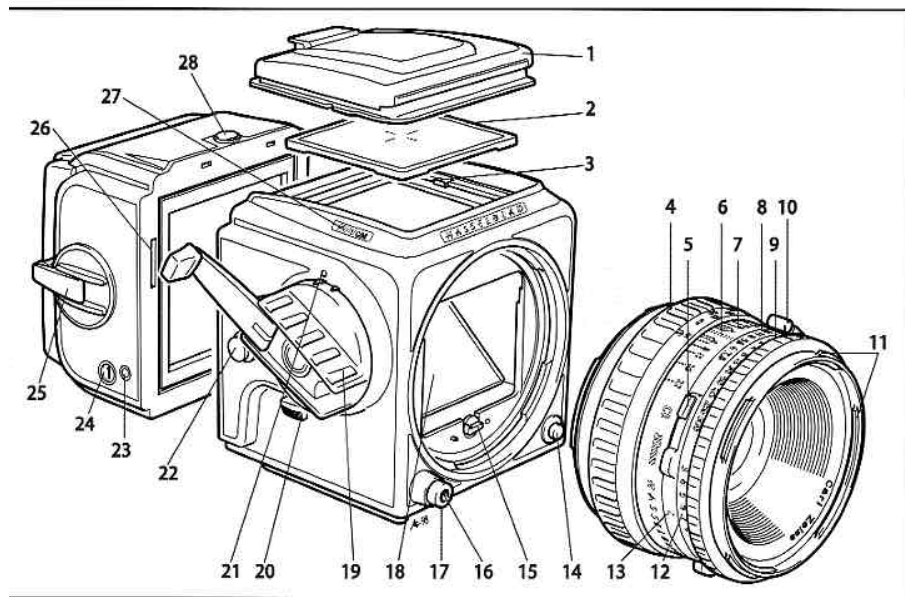
### SERVICE

You should return your equipment to a service centre for occasional checking and preventive maintenance to ensure optimal reliability. If your camera is used constantly and intensively, periodic check-ups every six months are recommended at one of the "Hasselblad Authorized Service Centers". They have the expert staff and specialised equipment necessary to ensure that your equipment remains in perfect working order.

### GUARANTEE

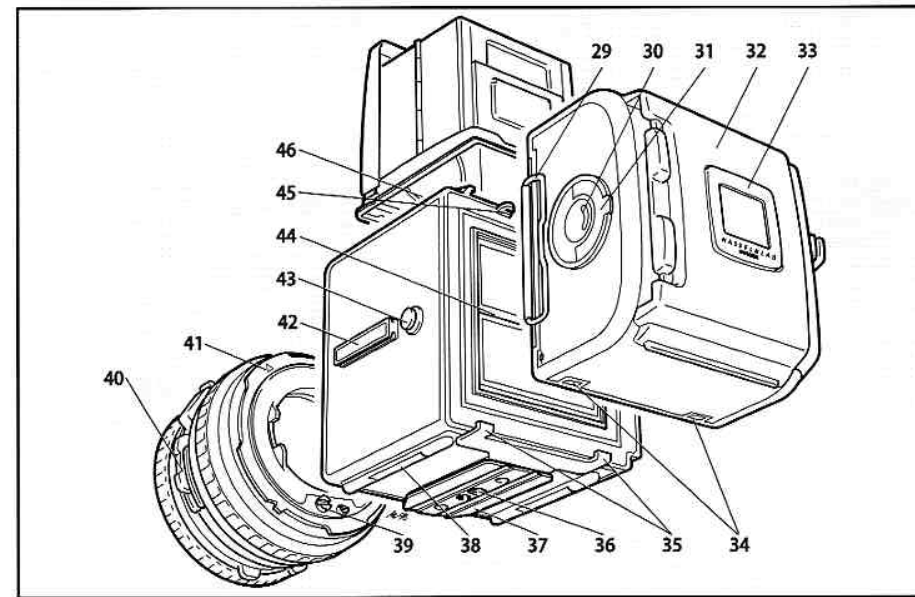
Provided that you bought your equipment from an authorised Hasselblad outlet, it is covered by an international guarantee for one year. The guarantee document and a registration card are supplied with the camera. Keep the guarantee document carefully, but fill in the registration card and return it to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

## 501CM

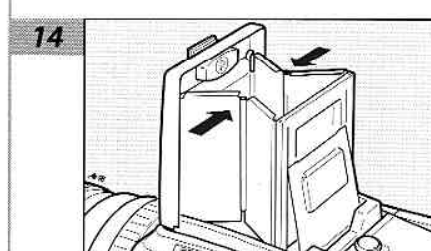
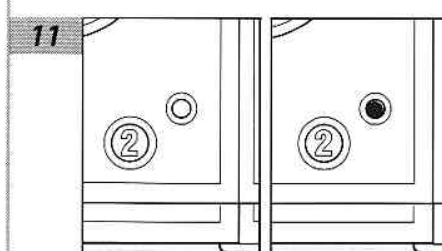
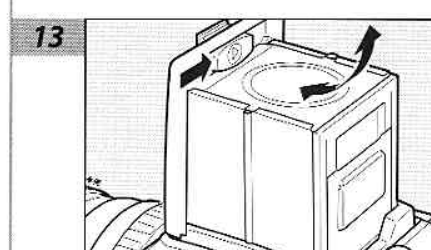
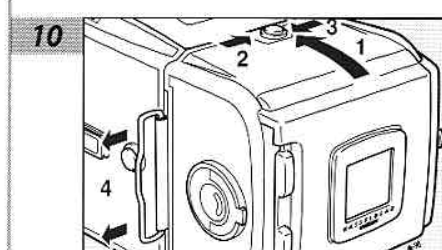
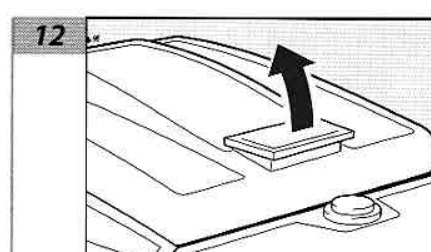
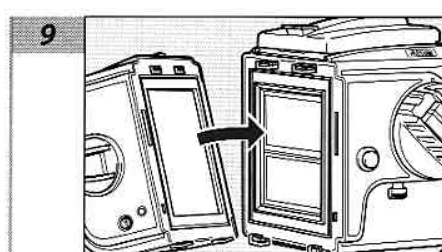
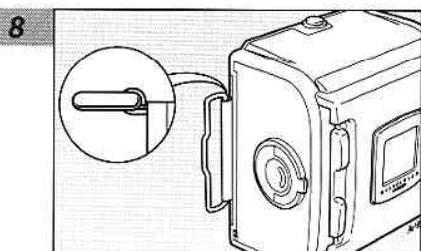
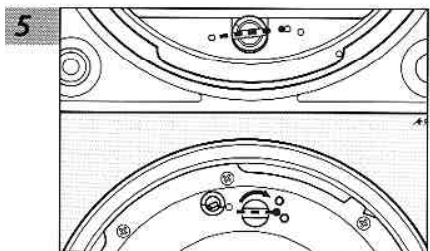
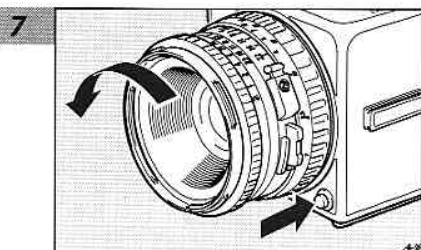
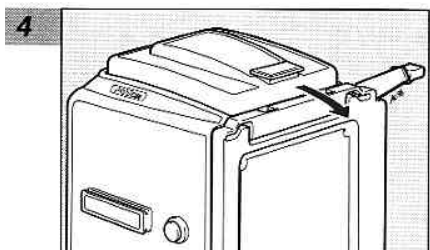
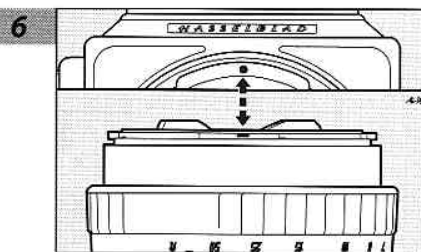
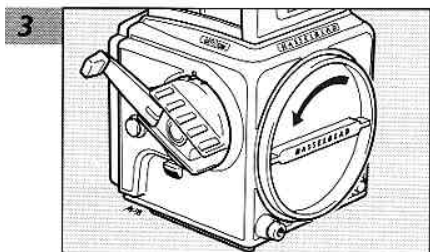


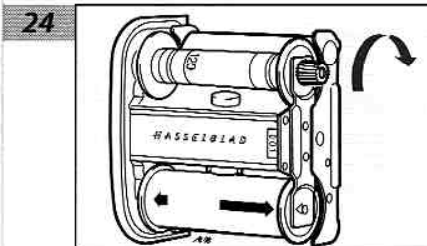
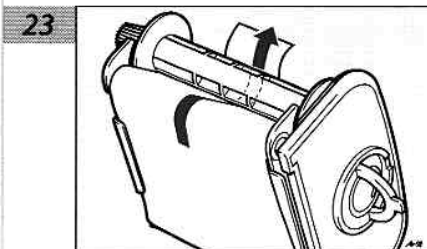
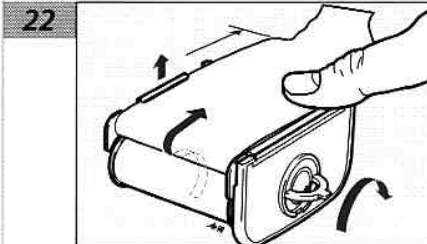
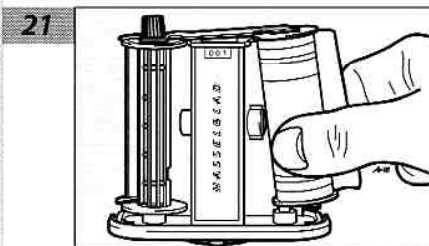
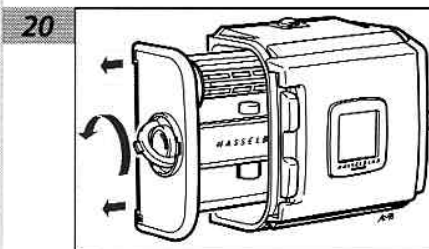
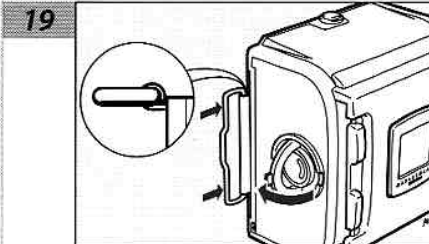
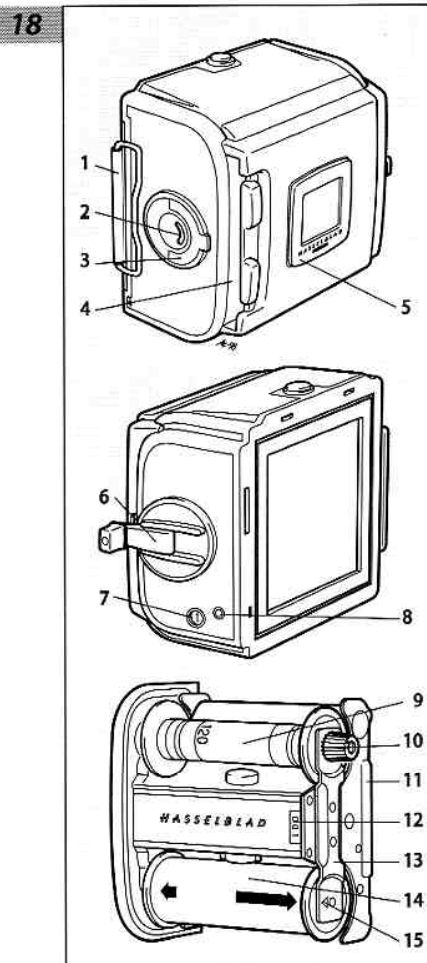
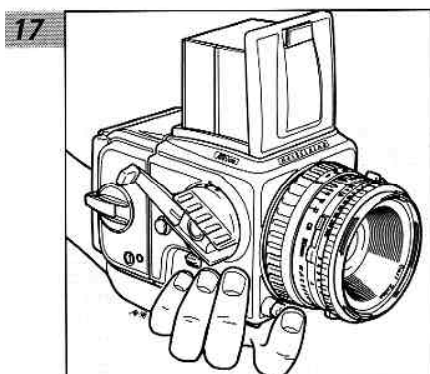
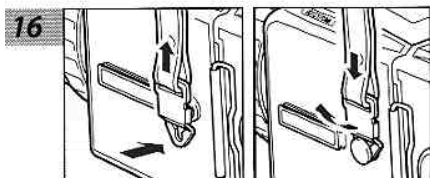
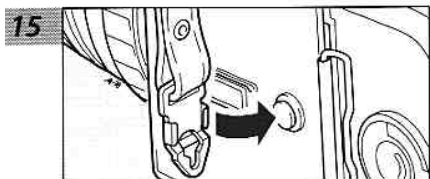
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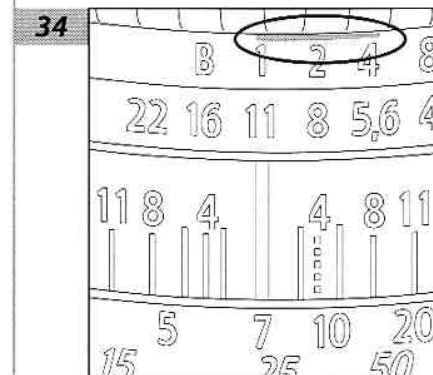
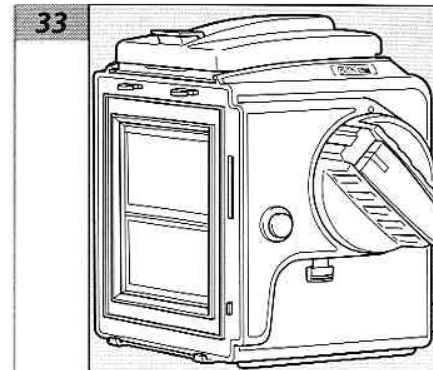
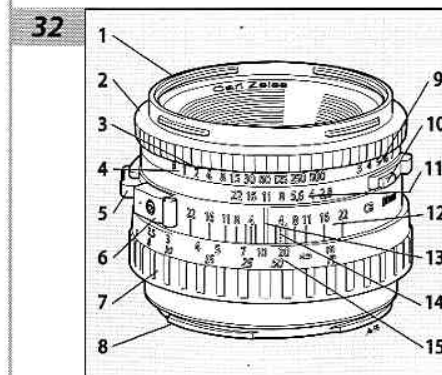
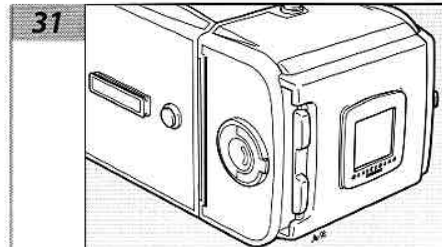
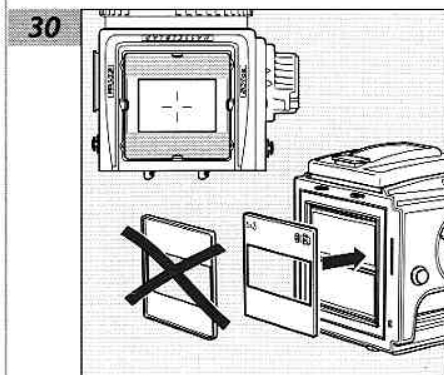
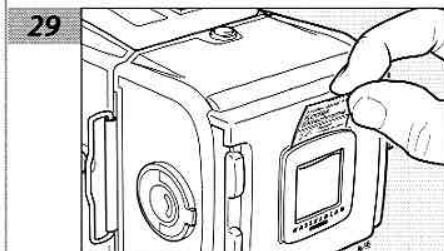
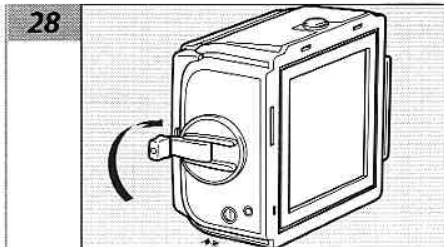
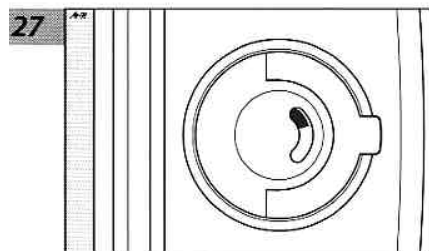
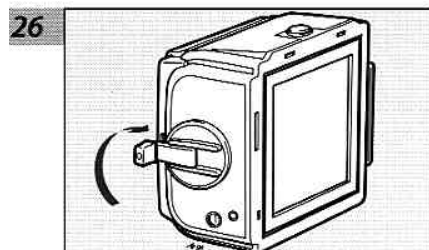
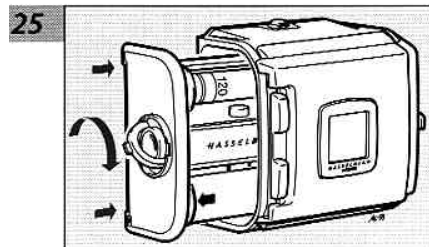
## 501CM

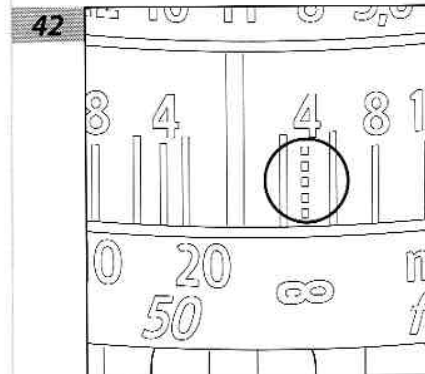
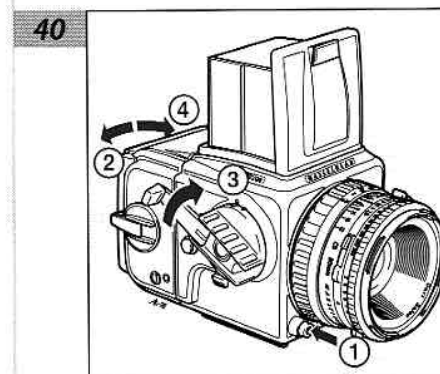
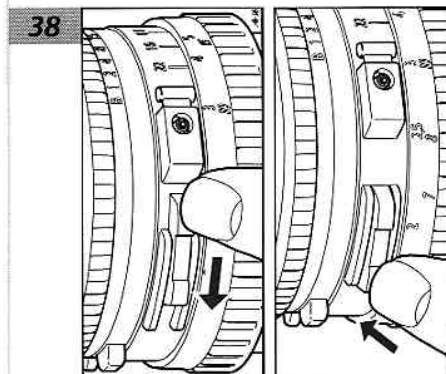
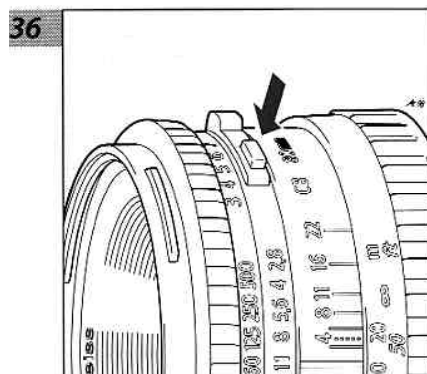
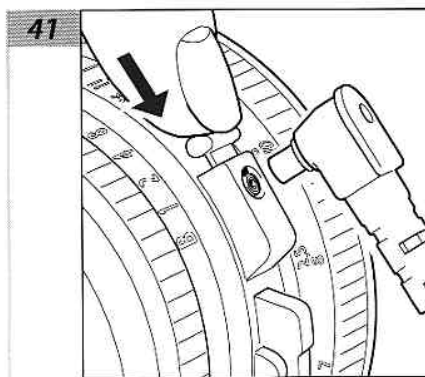
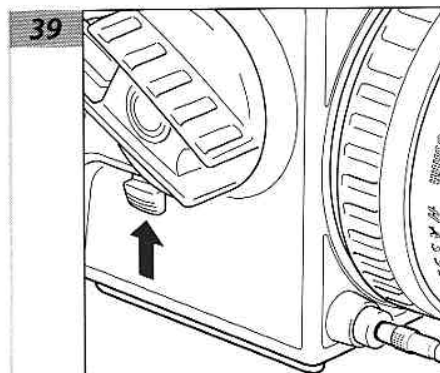
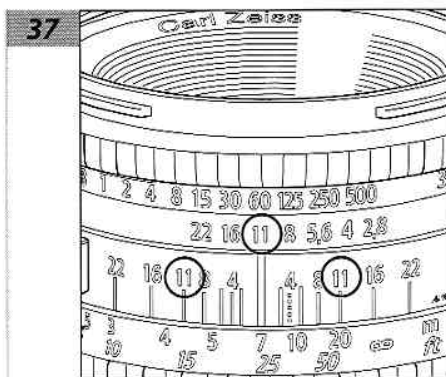
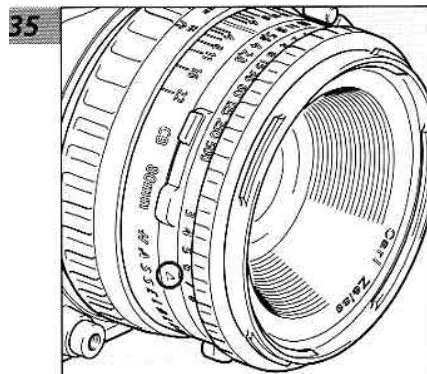


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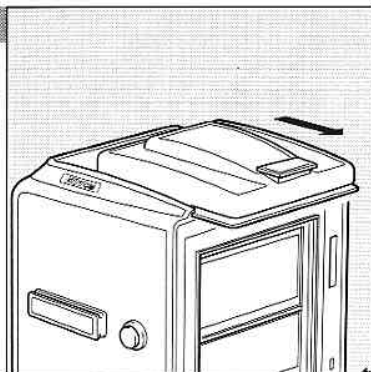




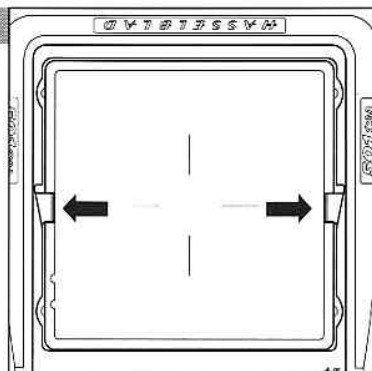




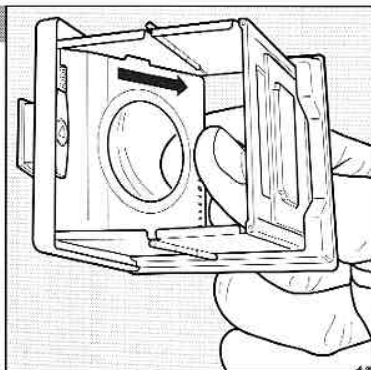
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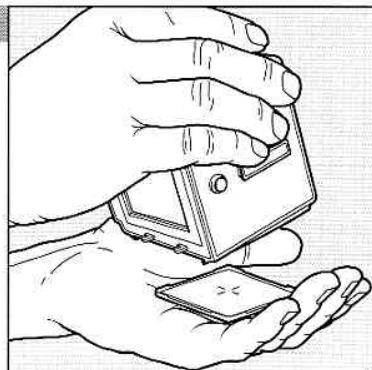
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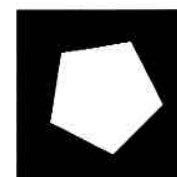
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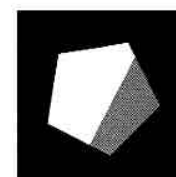
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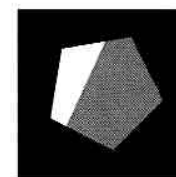
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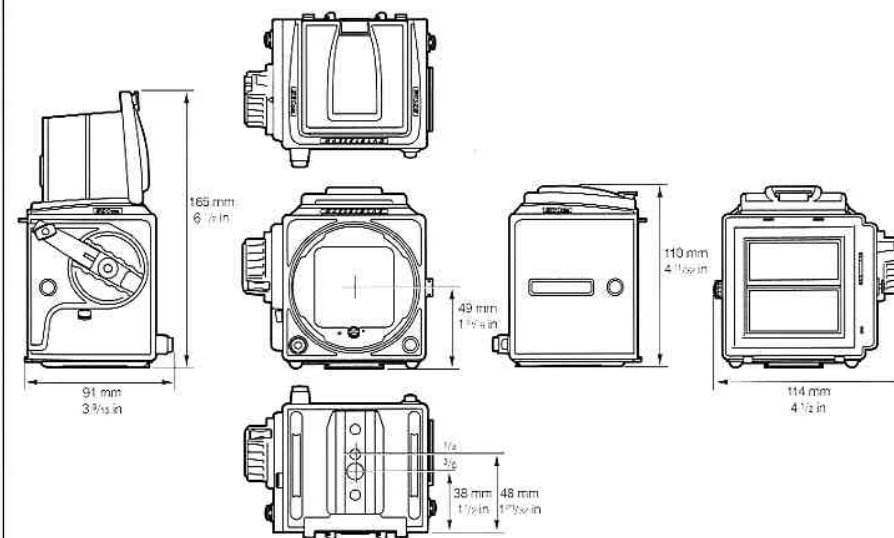


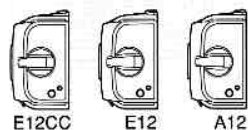
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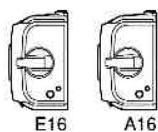
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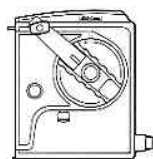
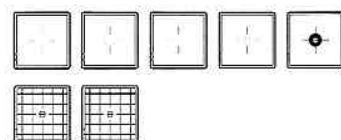
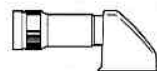
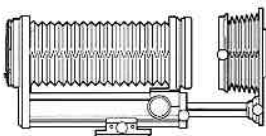
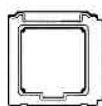
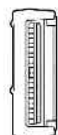
ix6 cm



ix4.5 cm



0 mm



501CM



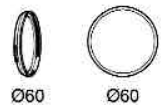
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PM5



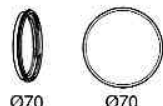
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Ø60



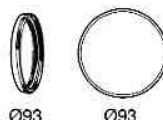
Ø60



Ø70



Ø70



Ø93



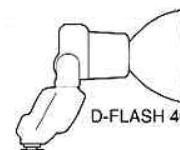
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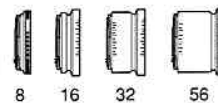
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PM90



D-FLASH 40



8

16

32

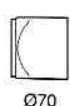
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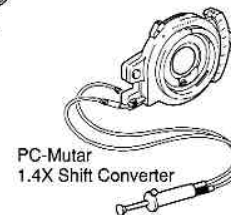
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Ø70



Ø93



PC-Mutar  
1.4X Shift Converter

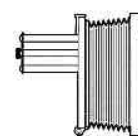
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Teleconverter 1.4XE



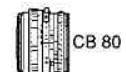
Converter 2XE



Proshade 6093T



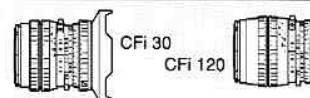
CB 60



CB 80

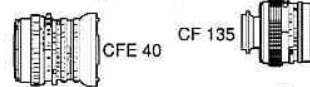


CB 160



CFi 30

CFi 120



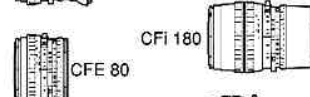
CFE 40

CF 135



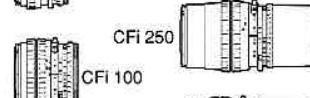
CFi 50

CFi 150



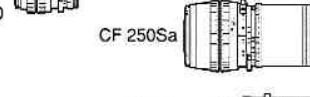
CFi 180

CFE 80

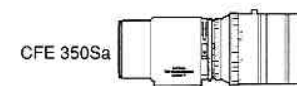


CFi 250

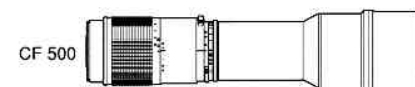
CFi 100



CF 250Sa



CFE 350Sa



CF 500

Variogon  
CF 140-280

