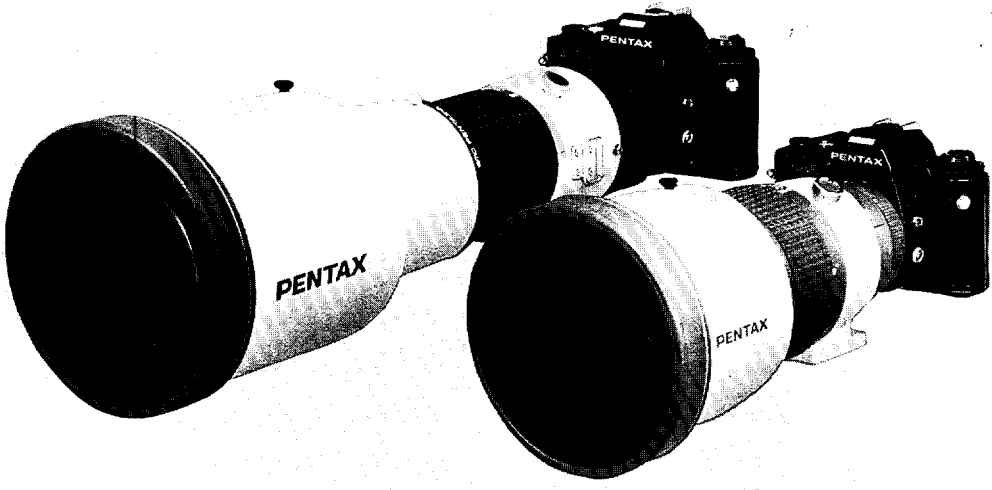
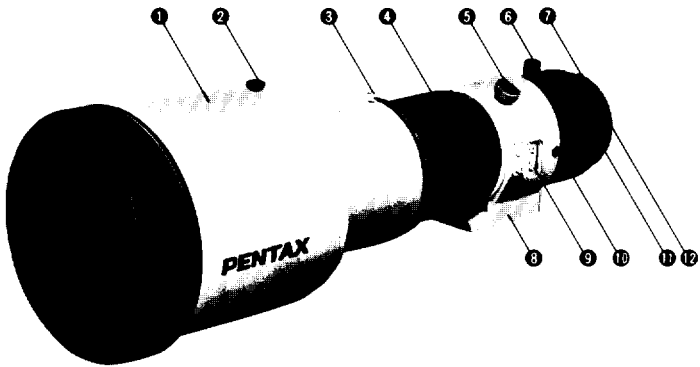
PENTAX®

SMC PENTAX-A* 300mm f/2.8 ED(IF)
SMC PENTAX-A* 600mm f/5.6 ED(IF)



DESCRIPTION OF PARTS



❶Hood
❷Hood lock screw
❸Focus-preset screw
❹Focusing ring
❺Lock screw for changing camera position vertically or horizontally
❻Filter holder knob
❼Aperture auto (A position) lock button
❽Built-in tripod mount
❾Strap ring
❿Strap eyelet
⓫Aperture control ring
⓬KA mount

The use of these two lenses are almost common, so that the 600mm f/5.6 A is employed for the descriptions of parts and related pictures in this operating manual.
*When taking infrared photographs by the 600 f/5.6 lens with either color or monochrome film, you do not need distance compensation.
*The 300mm f/2.8 lens is not equipped with strap ring nor strap eyelet.

SPECIFICATIONS

Extra Low Dispersion Glass and Inner Focus

As an example of the new technology in *A Series* lenses, look into the advanced design of the SMC Pentax A★ lenses. These ultra-telephoto lenses reduce chromatic abberation with extra low dispersion (ED) optical elements. Extra low dispersion glass attains performance levels not possible with conventional optical glass.

Inner focus is another innovation in the A★ lenses. The rear element group moves inside the barrel. The length and the balance of the lens do not change as you focus. This makes focusing smoother and faster. Both are usable in combination with Rear Converters 1.4X-L and 2X-L.

•Lens	•Minimum Aperture	•Angle of View (Degree)	•Lens Construction (Groups-Elements)	•Diaphragm	•Minimum Focusing Distance •m	•ft.	•Maximum Diameter & Length (ø mm x mm)	•Weight •gr.	•oz.	•Filter Size (mm)
SMC Pentax-A★ 300mm f/2.8 ED (IF)	32	8.3	8-8	FA	3	9.8	133x236	2970	104.9	49
SMC Pentax-A★ 600mm f/5.6 ED (IF)	45	4.1	6-8	FA	5.5	18	133x386	3280	115.7	49

A★ = Called A-star, High-performance, compact lens using special glass elements.

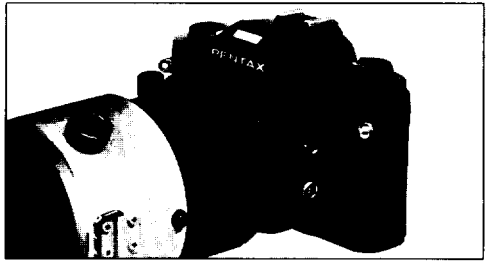
Accessories: Front cap and mount cap

ED = Short for Extra-low Dispersion glass element

IF = Short for Inner Focus mechanism

With this A lens, your Pentax KA mount cameras can be used in multiple exposure modes. For Programmed AE mode etc., set the lens aperture ring to the "A" auto position. With K or Kf mount cameras, automatic aperture control is not possible. Aperture values should be selected from the ordinary f-stop scales as with conventional SMC Pentax lenses.

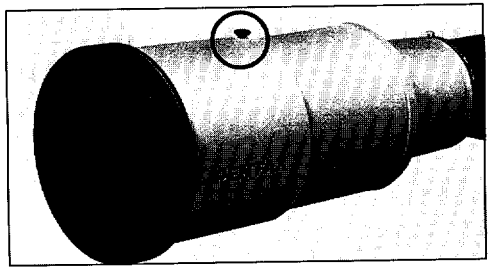
MOUNTING AND SELECTING A (AUTO) POSITION



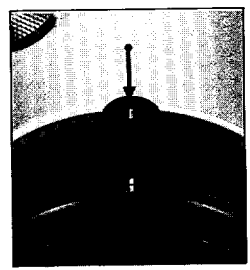
Mount the lens on your camera in the same way as with conventional Pentax bayonet mount K, Kf or KA mount lenses.

To set the aperture ring to the "A" position, align the green A (auto) position index with the index while pressing the Aperture auto lock button. This procedure automatically locks the lens in the Auto position.
To disengage the lock, turn the aperture ring towards the ordinary f-stop scale while pressing the Aperture auto lock button.
When using other cameras (with K or Kf mounts), only the ordinary f-stops are effective. So the aperture ring must be set to the ordinary aperture stops.

HOOD AND FILTER



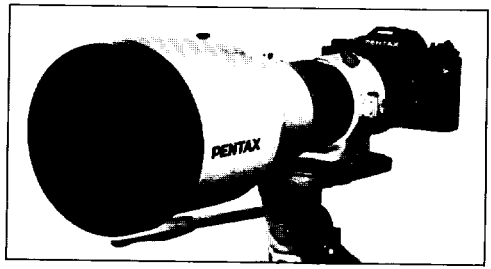
The built-in lens hood can be extended for use by first loosening the lock screw and then just pulling out the hood. If rather difficult to extend the hood, try rotating it gently while pulling it out.



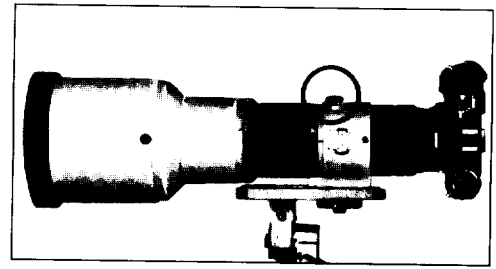
As illustrated, the filter holder can be drawn out from the lens barrel by turning the knob counter-clockwise until it stops while keeping it depressed. Screw a 49mm filter into the holder, return the holder to the original position, and turn the knob clockwise until the red lines are aligned, to lock it.

• When the filter holder is inserted into the lens barrel improperly —inside out, it cannot be locked and therefore, may drop down for possible damages. Make sure that it is inserted correctly with the red lines aligned.

BUILT-IN TRIPOD MOUNT AND CHANGING CAMERA POSITIONS



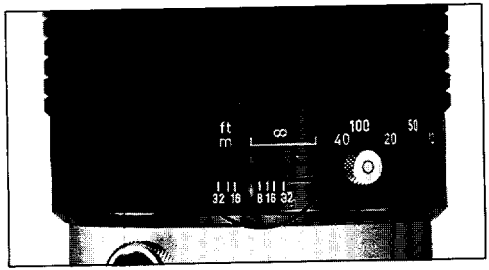
These lenses are provided with a built-in tripod mount. We recommend that you use a steady tripod for safe operation. To change camera position either vertically or horizontally, loosen the fastener screw, and revolve your camera/lens combination by 90° in any direction. Then tighten the screw to lock the camera in place.



• The rotation of the focusing ring does not change the total length of the lens due to the employment of an Inner Focus mechanism. Because the length does not change, focusing does not affect the balance of the lens/camera combination on the tripod.

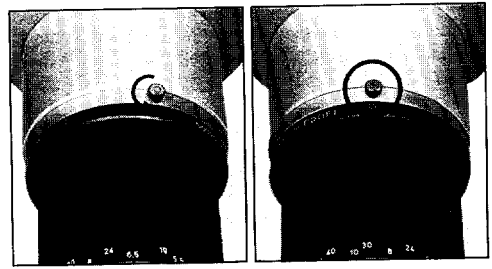
When mounting the 300mm lens on a tripod, use the tripod adaptor (optionally available) to avoid hitting the tripod head.

FOCUSING AND FOCUS PRESET



Focus by turning the focusing ring until the subject appears sharp in the viewfinder. The focusing ring is designed to turn slightly beyond the ∞ position. The actual ∞ position may shift due to temperature conditions such as hot or cold weather. Be sure to focus precisely through the viewfinder even when taking pictures of distant subjects.

This lens has a unique Focus-preset features. It is particularly efficient when you desire to shoot moving subjects, such as sporting events or animals, at two locations differing in distance, or to freeze focus at a particular position. To use the preset

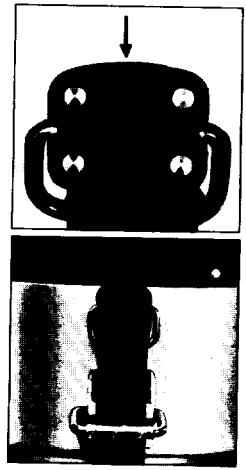


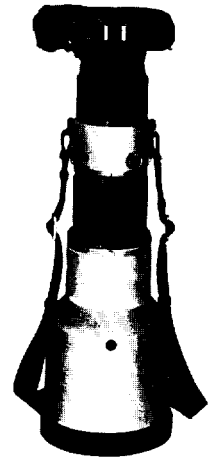
function, first loosen the preset screw. Then turn the focusing ring to focus on the subject and tighten the screw to preset the focus position. To return to the preset position, turn the focusing ring till it stops with a click.

FASTENER STRAP (LX)

The most convenient way to carry the camera with a long telephoto lens is strapped over your shoulder, especially for outdoor photographing. The Fastener Strap (LX) is available for the 600mm f/5.6 lens for this purpose.

Slightly depress the fastener's metal piece (indicated by arrow) with a coin. Pass the strap through the strap ring of the lens, attach the fastener to the strap eyelet, and then press the metal piece again with a coin to lock the strap in place.





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Asahi Optical Europe N.V. Weiveldlaan 3-5, 1930 Zaventem Zuid-7, BELGIUM
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Pentax U.K. Limited Pentax House, South Hill Avenue, South Harrow, Middlesex HA2 OLT, U.K.
Pentax France S.A. 2.I. Argenteuil, 12, Rue Ambroise-Croizat, 95100 Argenteuil, FRANCE
Pentax (Schweiz) AG Industriestrasse 2, 8305 Dietlikon ZH, SWITZERLAND
Pentax Svenska AB Box 650, S-751 27 Uppsala, SWEDEN
Pentax Nederland Spinveld 25, 4815 HR Breda, THE NETHERLANDS
Pentax Corporation 35 Inverness Drive East, Englewood, Colorado 80112, U.S.A.
Pentax Canada Inc. 1760 West 3rd Avenue, Vancouver, B.C. V6J 1K5, CANADA
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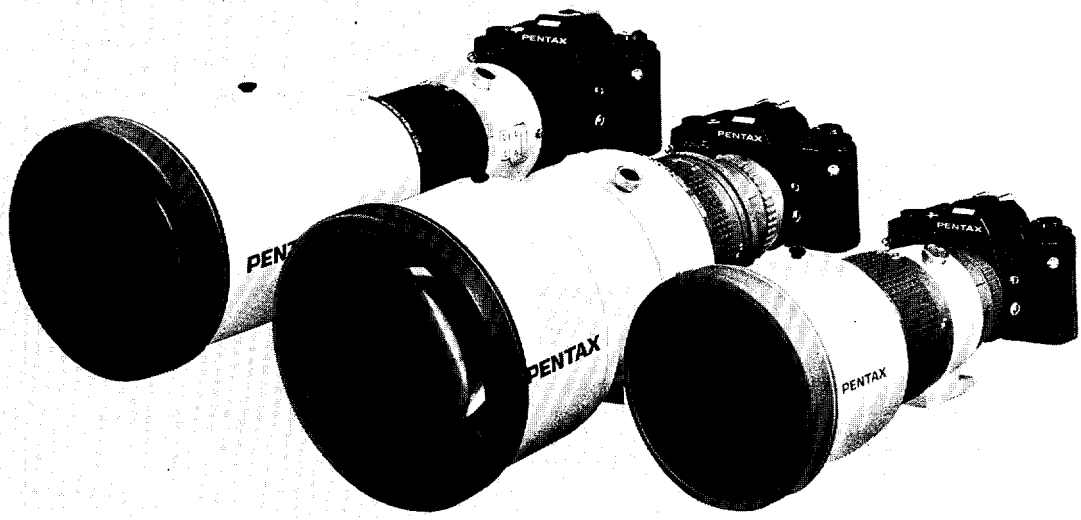
PENTAX®

f/2.8 ED(IF)

f/2.8 ED(IF)

f/5.6 ED(IF)



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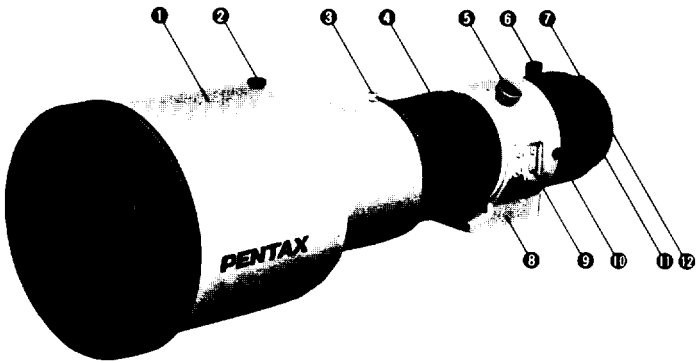

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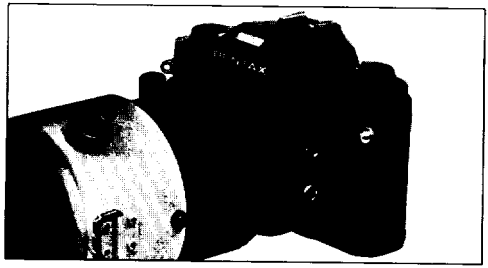

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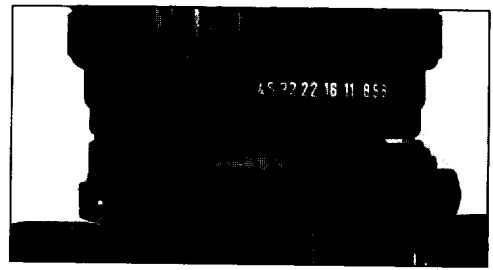

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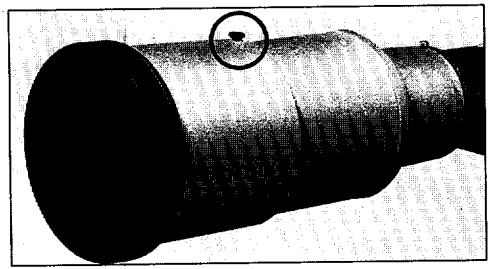

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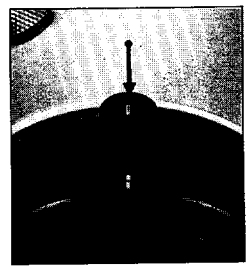

As illustrated, the filter holder can be drawn out from the lens barrel by turning the knob counter-clockwise until it stops while keeping it depressed. Screw a 49mm filter into the holder, return the holder to the original position, and turn the knob clockwise until the red lines are aligned, to lock it.

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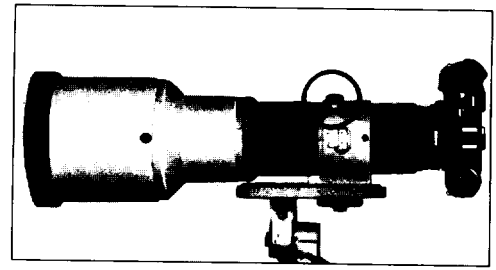

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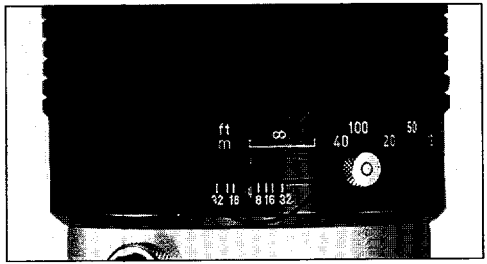

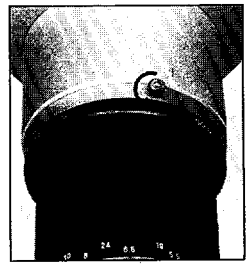

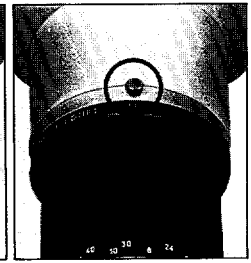

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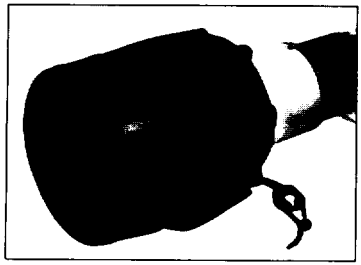
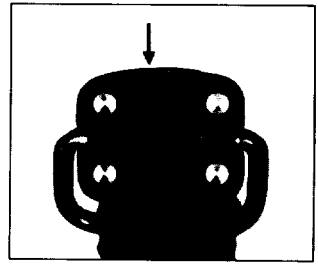
• The photo on the above left is of a 300mm lens.

FRONT LENS CAP; STRAP C



The front lens cap is made to wrap up the front of the lens. Always put the cap on when not using the lens, to keep the front lens element free from scratch, dust dirt, etc.

1



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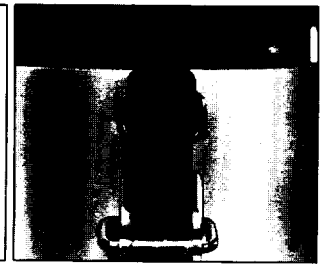
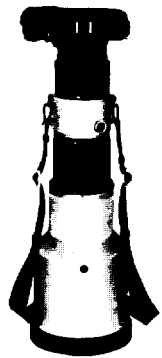




The Strap C is available for the 400mm and 600mm lenses. Carried on your shoulder, it is very handy for carrying such a heavy lens around in outdoor photography.

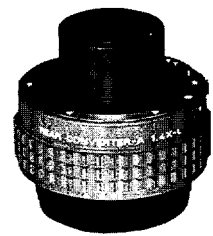
1. As illustrated above, push the arrow-indicated portion of the fastener slightly with a coin or the like.
2. Pass the strap through the strap ring on the lens, then attach the fastener to the strap eyelet, and push the arrow-indicated metal piece back with a coin. Try pulling the strap hard to make sure that it has been secured in place.

REAR CONVERTERS A

Lens \ R.C.	A·1.4X-L	A·2X-L	A·1.4X-S	A·2X-S
A* 300mm F2.8ED(IF)	◎	◎	○	○
A* 400mm F2.8ED(IF)	◎	◎	△	○
A* 600mm F5.6ED(IF)	◎	◎	△	○

L-type Rear Converters are designed to offer optimum performance with such ED-type ultra-telephotos, even with the diaphragm fully open.

How to refer to the above chart
◎ Extremely compatible
○ Compatible
△ Picture corners may become dark due to "vignetting."



1.4X-L

2X-L

LENS–FOCUSING SCREEN COMPATIBILITY

(1) LX Focusing Screens

Lens \ For LX	SA-26	SA-37	SC-26	SE-25	SA-21	SA-23	SB-21	SC-21	SD-21	SE-20	SG-20	SI-20
A*300mm F2.8EDX(IF)	○	◎	○	○	○	○	○	○	○	○	○	○
A*400mm F2.8EDX(IF)	◎	◎	◎	◎	△	△	△	△	△	△	△	△
A*600mm F5.6EDX(IF)	◎	◎	◎	◎	▲	▲	▲	▲	△	△	△	△

(2) When Used With Rear Converters A

R.C. \ For LX	SA-26	SA-37	SC-26	SE-25	SA-21	SA-23	SB-21	SC-21	SD-21	SE-20	SG-20	SI-20
A·1.4×-L	8	○	8	◎	4	2.8	4	4	△	△	△	△
A· 2 ×-L	5.6	○	5.6	◎	2.8	▲	2.8	2.8	△	△	△	△
A·1.4×-S	8	○	8	○	4	2.8	4	4	○	○	○	○
A· 2 ×-S	5.6	○	5.6	○	2.8	▲	2.8	2.8	○	○	○	○

(1) With MX Focusing Screens, the combination of the 600mm f/5.6 and SA-1 or SA-3 is ▲, while other combinations are ○.

◎ Especially compatible
○ Compatible
△ The matte field becomes a little too dark to see the image.
▲ The split-image and microprism in the viewfinder become dark.

(2) When the MX focusing screens are used with the Rear Converter A, SA-1 works the same way as SA-21 in the above table and likewise SA-3 does SA-23; SB-1 does SB-21; SC-1 does SC-21. Other combinations are ○ (= Compatible).

(2) The numerals in the above table "When Used With Rear Converters A" indicate the maximum apertures of the master lenses. With the lenses having the maximum aperture smaller than these, the microprism may become dark.

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Pentax France S.A. Z.I. Argenteuil, 12, Rue Ambroise-Croizat, 95100 Argenteuil, FRANCE
Pentax (Schweiz) AG Industriestrasse 2, 8305 Dietlikon ZH, SWITZERLAND
Pentax Svenska AB Box 650, S-751 27 Uppsala, SWEDEN
Pentax Nederland Spinveld 25, 4815 HR Breda, THE NETHERLANDS
Pentax Corporation 35 Inverness Drive East, Englewood, Colorado 80112, U.S.A.
Pentax Canada Inc. 1760 West 3rd Avenue, Vancouver, B.C. V6J 1K5, CANADA
Asahi Optical Brasileira Ind. e Com. Ltda. Rua Capitão Antonio Rosa 376, Sala 121 Ed. PBK, São Paulo, BRASIL

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