

**GRAFLEX**  
**ENLARG-OR-PRINTER**  
**Manual**

Manufactured By

**FOLMER GRAFLEX CORPORATION**  
**ROCHESTER, NEW YORK, U. S. A.**



## *Foreword*

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**Y**OU can have more fun with and derive greater satisfaction and enjoyment from your ENLARG-OR-PRINTER if it is as fully understood as your camera.

This booklet is prepared to introduce you to the mechanical construction and operation of your ENLARG-OR-PRINTER. Careful reading of the contents will disclose the ease with which you can employ its many features. Thus will you doubly enjoy putting into practice many of the ideas suggested in your book, "Photographic Enlarging."

## INDEX

	<i>Page</i>
Cards, Greeting.....	18
Care of Enlarg-or-Printer.....	12
Dodging.....	16
Dodging Door.....	16
Enlargements: 8"x10".....	13
11"x14".....	15
Giant.....	15-16
Lens.....	3-4
Lensboard.....	3
Lighting System.....	4
Masking Device.....	9
Masks.....	6-7
Negative Holder.....	6
Negative Holder Guide.....	7
Negative Masks.....	6
Negative Strip Film Holder.....	6
Opal Glass Diffusing Screen.....	4-5
Paper Negatives.....	19
Platen, General Use of.....	5-6
Platen, Folded Back.....	5
Platen Switch.....	7-8
Prints, Contact.....	17
Projection Lamp.....	4
Retouching.....	19
Ruby Lamp.....	4
Scale, Times Enlargement.....	8-9
Screen, Focusing.....	12
Slides, Lantern.....	18
Strip Film Holder.....	6
Switch, Control.....	7-8
Switch, Platen.....	7-8
Tilting Top.....	17

# Getting Acquainted With Your ENLARG-OR-PRINTER

## General Construction

The Graflex ENLARG-OR-PRINTER is of unique construction. This particular type of structure has been worked out to provide for the amateur and professional alike a means of making contact prints and enlargements in the shortest time possible as well as to provide an instrument that occupies a minimum of space and which can be used in any darkroom and stored in almost any out-of-the-way place. Because of its unique construction it is well for the new owner to become thoroughly familiar with the various parts and adjustments before attempting to use this instrument. Let us take up each separate part to familiarize the operator as to its location and use.

## The Lens and Lensboard

Since the lens assembly is the heart of ENLARG-OR-PRINTER, it should be discussed first. The assembly is accessible through the large dodging door at the left side of the instrument, opened by turning knob Y (Fig. 7). Fig. 1 is a top plan view of the Lens Carrying Member. This part of the device is raised and lowered by the Focusing Knob E (Fig. 3), thus changing the focal adjustment of the lens. In Fig. 1, A is the Lens, and B is the Lensboard adapted to take the National Graflex lens

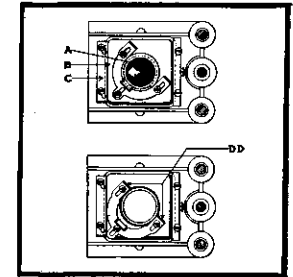


Figure 1

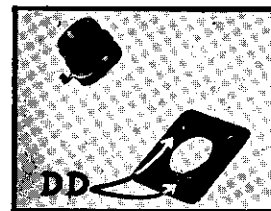
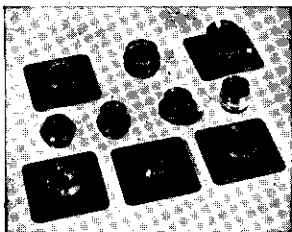


Figure 2

when removed from the National Graflex camera. The lensboard and lens are held in place by Slide Lock C. This slide lock, when moved to left, disengages lensboard which then can be removed with the lens. Fig. 2 shows the National Graflex lens separated from the lensboard. This is accomplished by sliding the clip from its locked position by pushing the two Up-turned Lugs DD.

For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.



Above: A group of Accessory Lenses available for use with the ENLARG-OR-PRINTER

Any lens of the proper focal length can be fitted to the appropriate lens board supplied by Graflex.

### The Lighting System

Again referring to Fig. 3 note the general placement of the various elements that make up the ENLARG-OR-PRINTER'S lighting system.

In the lower section of Fig. 3 Projection Lamp F is centered under Diffusing Screen G. Ruby Lamp S is positioned directly beside the projection lamp. The positions occupied by each are clearly indicated in Fig. 4 so that there need be no difficulty in making proper replacement of these lamps.

To replace lamps, first remove circular Lamphouse Cover AA (Fig. 5) by turning handle to horizontal position and pulling outward. Then, if projection lamp has cooled sufficiently, unscrew in the usual manner.

Any frosted lamp of proper voltage that fits the socket can be used for projection or printing. However, since the ENLARG-OR-PRINTER has been especially designed to accept and efficiently use the Photoflood Lamps, it is recommended that for best results, a Photoflood No. 1 or a Photo Enlarging Lamp be obtained for replacement purposes. The larger Photoflood Lamps are not recommended since their use will not produce even illumination on platen top.

The ENLARG-OR-PRINTER is regularly provided with lamps of 105-120 volts since electric circuits providing this voltage are usually available. For use with electric current of either greater or less voltage, it is recommended that the Graflex Service Department be written.

The Diffusing Screen G is readily removable through the circular lamphouse opening for cleaning or replacement purposes. Outward pressure on Retaining Latch H (Fig. 3) will permit opal glass to drop into the hand. Turn the narrow side toward you for removal.

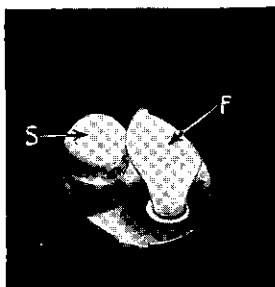


Figure 4

For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.

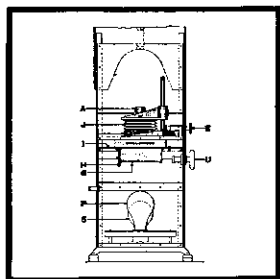


Figure 3

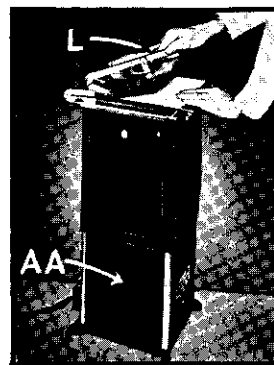


Figure 5

In Fig. 3 Bellows J is coupled to the lens carrying member. This complete unit is actuated up and down with respect to the Negative Carrier Table I (Fig. 3) by Focusing Knob E. (The Negative Carrier Table I is that part on which the negative holder rests when in position over the lamphouse opening).

### The Platen

The ENLARG-OR-PRINTER is equipped with a platen somewhat similar to those used on automatic printers—a type for increasing the speed of operation. The platen structure is clearly shown in Figs. 5, 6 and 7.

Fig. 5 shows the method of placing the sensitized paper on the platen glass when making either contact prints or enlargements.

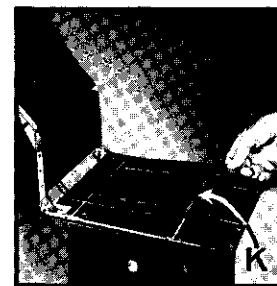


Figure 6

Fig. 6 shows the platen open with the Focusing Screen K being placed in position for focusing.

Fig. 7 shows the platen disengaged so that it will lay back against the ENLARG-OR-PRINTER when an enlargement is to be made on a large sheet of paper that extends beyond the sides of the platen. For instructions covering this operation, see page 14.

In practice, when focusing has been completed, (Fig. 6) the focusing screen is

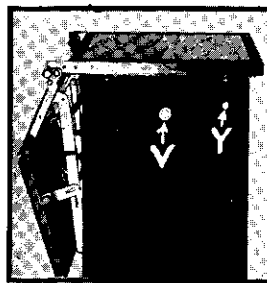


Figure 7

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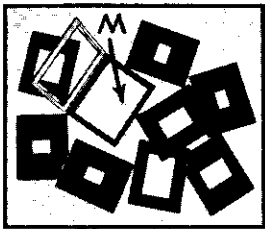


Figure 8

## The Negative Holder and Masks

The Negative Holder M, which is of the so-called "book-type," is illustrated with its various masks in Fig. 8. When the negative holder is inserted into the ENLARG-OR-PRINTER (See Fig. 17) the proper pressure is automatically supplied to hold the negative flat.

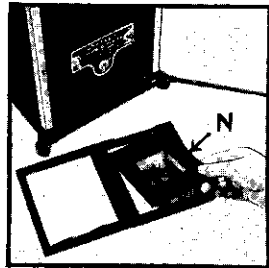


Figure 9

It will be noted that masks are provided for all of the popular picture sizes. Smaller sections of larger negatives up to 4"x5" can be projected equally well by selection of the proper size of mask.

On the sheet of glass in the bottom of the right hand section of the holder, (See Fig. 9) the negative from which the enlargement is to be made is placed dull side up. A mask with an opening the size of

the picture area of the negative is selected, and placed over the negative. (If working with a larger negative, no mask need be used.) The negative then is moved about beneath the mask until the proper section appears through the opening in the Mask N, the remaining sheet of glass is placed over the mask and the hinged cover of the holder is then closed in book fashion.

Whenever enlargements are to be made from strip film, the accessory strip film holders are particularly convenient to use. In practice, the glass is removed from the negative holder. The two parts of the strip film holder (See Fig. 10) are then separated by freeing the one with the holes (the top) from the one with the inserting pins (the base). One

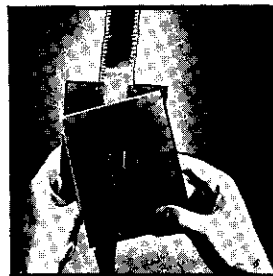


Figure 10

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

replaced by the sensitized paper (Fig. 5). Downward pressure on Platen Handle L (Fig. 5) brings the top platen snugly against the sensitized paper, holding it flat against the top platen glass. Final downward pressure on Handle L automatically actuates the built-in switch, causing the projection lamp to be illuminated.

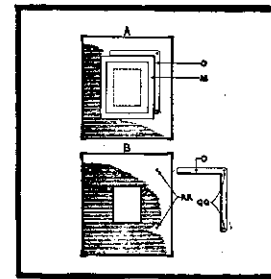


Figure 11

When the Negative Holder Guide O is in position, the negative holder is always centered by inserting it into the ENLARG-OR-PRINTER with the hinged side to the right. By reaching through the opening at the back of the ENLARG-OR-PRINTER (illustrated in Fig. 14), the negative holder may be pushed forward to facilitate its removal.

To properly position the guide, insert it into the front opening of the Negative Carrier Table I (Fig. 12) until the two small pins QQ (Fig. 11) slip into their respective sockets RR (Fig. 11) in the negative carrier table.

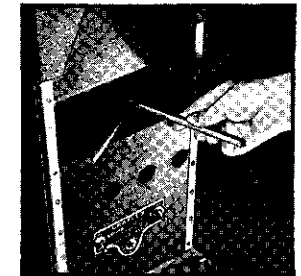


Figure 12

When the Negative Holder Guide O is in position, the negative holder is always centered by inserting it into the ENLARG-OR-PRINTER with the hinged side to the right. By reaching through the opening at the back of the ENLARG-OR-PRINTER (illustrated in Fig. 14), the negative holder may be pushed forward to facilitate its removal.

## Control Switches

Fig. 13 illustrates the switch panel. One should become accustomed to the several switches before actually using the ENLARG-OR-PRINTER.

The lower switch marked "Master Control" is the line switch controlling the flow of current to the ENLARG-OR-PRINTER. It makes it unnecessary to disengage the plug when the outfit is not in use. When at the "on" position, the Ruby Lamp S, Fig. 4, is lighted, and will

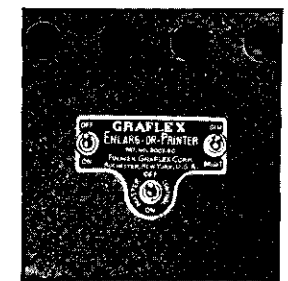


Figure 13

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

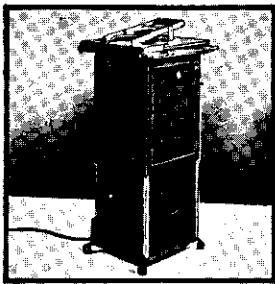


Figure 14

remain lighted except for such periods as the Projection Lamp F is burning, at which time the red lamp is automatically extinguished.

When the left hand switch is at the "off" position, the projection lamp is lighted *only* by the platen switch. (The platen switch is automatically operated as pressure on the platen handle forces the platen tightly against the sensitized paper.)

Often it is desired to turn on the projection lamp without using the top platen, e.g., for focusing; or for making a projection on a large sheet of paper (Fig. 20); or when the platen top is laid back parallel with the ENLARG-OR-PRINTER (Fig. 7). In these instances the projection lamp is lighted by pushing the left hand switch to "on."

The right hand switch determines whether the lamp burns at full brilliancy ("Bright") or at the lower level of illumination ("Dim"). This switch controls the intensity of illumination *at all times*—both when the left hand switch is in use and when the projection lamp is automatically lighted by the platen switch.

*When through using the ENLARG-OR-PRINTER, the Master Control switch should always be at the "off" position which extinguishes all lamps.*

### The "Times Enlargement" Scale

At the right hand side of the ENLARG-OR-PRINTER, illustrated in Fig. 15, is the "Times Enlargement" Scale T. This scale permits the operator to set the instrument for a given "times enlargement"—if either a 2" or a 3" lens is in use. Scales for lenses of intermediate focal length may be readily worked out.

The "times enlargement" scales are easy to use. An example: Let us assume that a 3" lens is in the machine and a 4-times enlargement is desired. The Locking Knob U (Fig. 15) is loosened and the upper part of the ENLARG-OR-PRINTER raised by grasping Knobs VV (Figs. 16 & 24) until the line directly

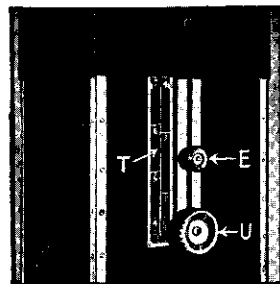


Figure 15

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above the numeral "4" in the "3" lens" column coincides with the lower edge of the top movable section of ENLARG-OR-PRINTER. Keeping the top section at this setting, illustrated in Fig. 15, tighten Knob U. If a 7-times enlargement is to be made through a 2" lens, it will be observed that the identical setting illustrated in Fig. 15 accomplishes this.

Critical focusing of the image, projected onto the Ground Glass Screen K, Fig. 6, is accomplished by turning Focusing Knob E (Fig. 15) to right or left until the image is critically sharp.

### The Masking Device

The ENLARG-OR-PRINTER is provided with a masking device comprising two sets of masking blades. (Fig. 16). This device makes it easy to obtain sharp, unexposed borders around either contact prints or enlargements. Etched, white center lines on each blade facilitate this.

When used in connection with contact printing, the masking device serves another purpose. The blades then act as metal fingers to hold the negative flat on the platen glass. This usage is illustrated in Fig. 16.

It will be noted that when the four blades are entirely closed in centrally, i.e., when the edge of each blade is positioned exactly over the "Zero" on the scale, that all four blades are in an exactly central position over the top platen glass. The scales are so graduated that if it is desired to obtain, let us say, a 2" square opening, the blades are moved away from "Zero" until the inside edge of each coincides with the numeral "2" on the scale. Similarly, any other size opening may be established with the masking blades.

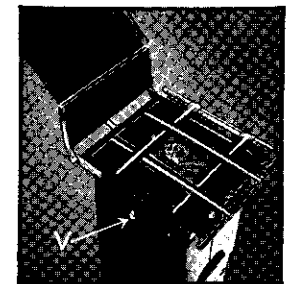


Figure 16

It is well to always work away from the "Zeros" (which are centrally located on the scales) since the openings thus masked are centered with the lens and with the negative in the negative holder (already centered in turn by the negative holder guide previously described on page 7).

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

# Sectional Views and Photographic Illustrations of Your ENLARG-OR-PRINTER

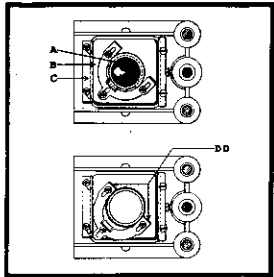


Figure 1

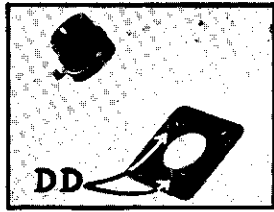


Figure 2

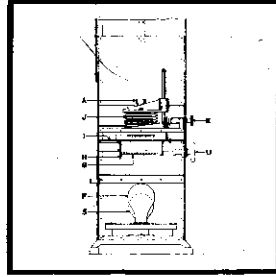


Figure 3

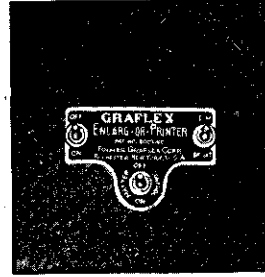


Figure 13

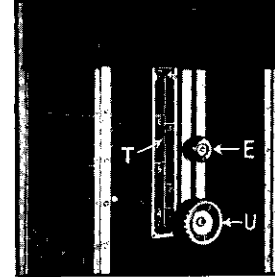


Figure 15

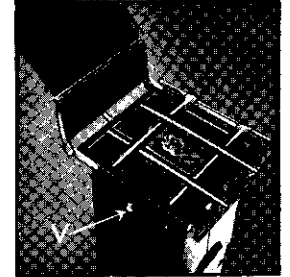


Figure 16

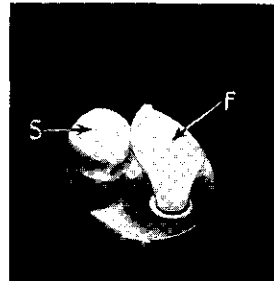


Figure 4

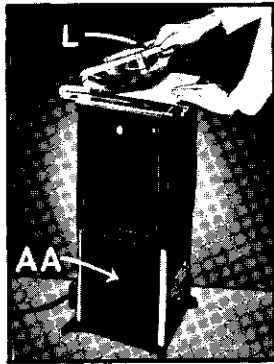


Figure 5

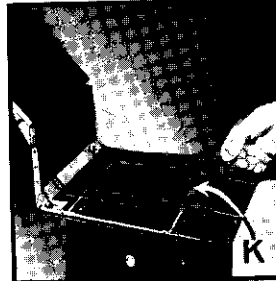


Figure 6

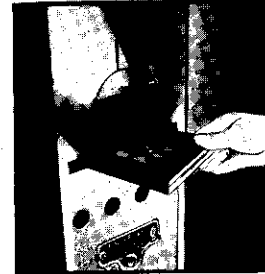


Figure 17

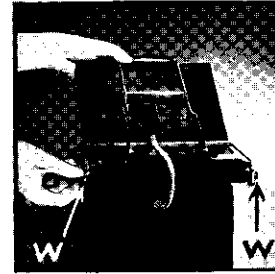


Figure 19

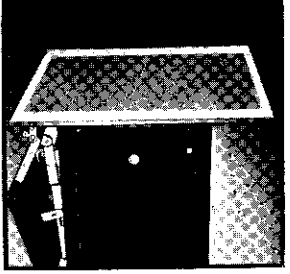


Figure 20

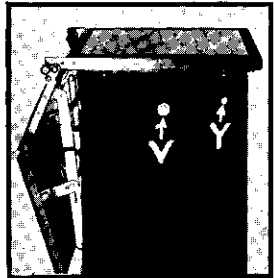


Figure 7

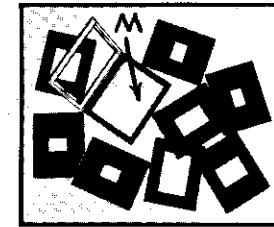


Figure 8

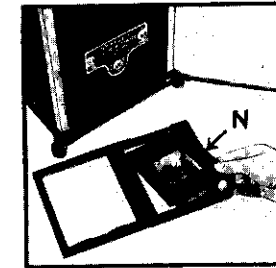


Figure 9

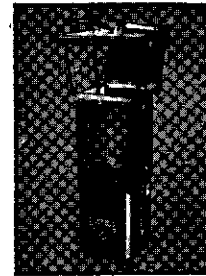


Figure 21

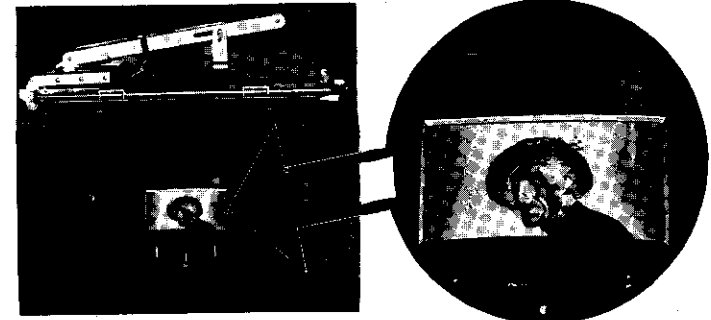


Figure 23



Figure 10

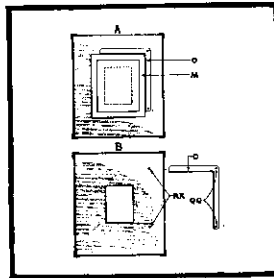


Figure 11

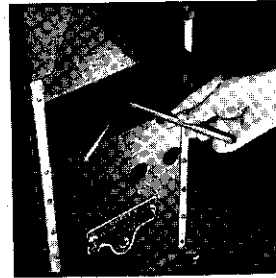


Figure 12

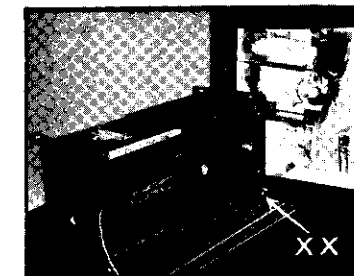


Figure 22

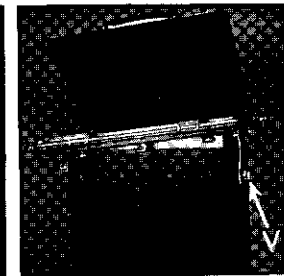


Figure 24



Figure 25

A—LENS  
B—LENSBOARD  
C—LENSBOARD SLIDE LOCK  
DD—UPTURNED LUGS  
E—FOCUSING KNOB  
F—PROJECTION LAMP  
G—OPAL GLASS DIFFUSING SCREEN

H—DIFFUSING SCREEN RETAINING LATCH  
I—NEGATIVE CARRIER TABLE  
J—BELLOWS  
K—FOCUSING SCREEN  
L—PLATEN HANDLE  
M—NEGATIVE HOLDER

N—MASK  
O—NEGATIVE HOLDER GUIDE  
QQ—NEGATIVE HOLDER GUIDE PIN  
RR—NEGATIVE HOLDER GUIDE PIN SOCKETS  
S—RUBY LAMP  
T—"TIMES ENLARGEMENT" SCALE

U—LOCKING KNOB  
VV—LIFTING KNOBS  
WW—SPRING LOCKING LUGS  
XX—PLATEN STOPS  
Y—DODGING DOOR LOCK  
AA—LAMPHOUSE COVER

## The Focusing Screen

It will be noted that the focusing screen furnished with the ENLARG-OR-PRINTER is of an unbreakable material especially selected for this use. While it will stand some abuse it should be handled with the same care accorded other photographic equipment since grease, dirt spots or scratches will impair the surface of this material just as it would the surface of a piece of conventional ground glass.

The screen is used for focusing every projection print. Because the image is projected from below, it is possible to critically check the focus through the use of a magnifier or reading glass—an advantage exclusively the ENLARG-OR-PRINTER'S.

Since the screen and the masking device are generally used in combination, it is suggested that the focusing screen be placed on top of the masking blades if the sensitized paper is to be so placed. The blades may be easily moved about beneath the screen for the purpose of determining either the desired composition or the proportions of the print borders.

Once accurate focus is determined through the use of the focusing screen, it is laid aside while the print or prints are made.

*Note: In use, the focusing screen should be held flat with the ground side against the platen glass.*

## Maintaining Efficiency

Since the efficiency of any photographic enlarging or printing apparatus is dependent on the efficient performance of each part, a suggestion in this connection may not be amiss.

Cleanliness is above all of primary importance. Dust, dirt, grime and stains should be kept from the several parts of the ENLARG-OR-PRINTER as carefully as they would be kept from the lens of your camera. The top platen glass, the lens, the negative holder glass, and the opal glass diffusing screen deserve particular attention. After the lens and negative holder have been removed for cleaning, the opal diffusing screen and the platen glass may be easily examined for dust or finger marks by turning on the lights and looking into the top of the ENLARG-OR-PRINTER through the platen glass. Since dirt or dust at these points will dissipate light, it is in the interest of both economy and superior results that these parts be kept clean.

The chamois, which we are pleased to supply upon receipt of the owner registration card, is of material assistance in keeping the glass surfaces of your ENLARG-OR-PRINTER spotless.

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

# ENLARG-OR-PRINTER in Use

## Making Enlargements

### 8" x 10" or Smaller Enlargements

After the extension cord of the ENLARG-OR-PRINTER has been plugged into a convenient household electric outlet, turn the master switch to the "on" position.

Place the selected negative emulsion side up in the negative holder and choose or cut from heavy black paper a mask which will conform to the size of the negative or to the area of the negative to be enlarged. Position the mask over the negative as described on page 6, close the negative holder, and insert it into the ENLARG-OR-PRINTER. (See Fig. 17.)

Lift the hinged top platen from the top platen glass into its upright position and lay the ground glass focusing screen on top of the masking blades. (See Fig. 6.)

If the "times enlargement" desired is known, release Locking Knob U (Fig. 15) and raise the upper section of the ENLARG-OR-PRINTER to the indicated position on the "times enlargement" scale governing the focal length of the lens used. Lock in position.

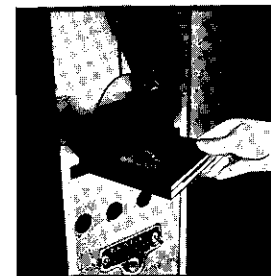


Figure 17

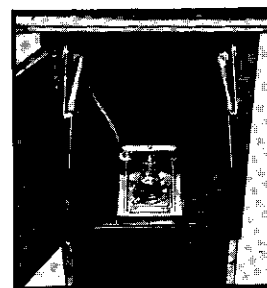


Figure 18

Move the left hand switch to the "on" position—and the right hand switch to the "dim" position (unless you are working with a very dense negative, in which case you may prefer to use the "bright" illumination for focusing).

Focus the image critically sharp on the focusing screen by turning the Focusing Knob E to the right or left.

Adjust the masking blades to accomplish whatever cropping or composition may be desired; then, lay the focusing screen aside.

Next, "stop down" the lens to the aperture at which you intend to make the enlargement. The lens diaphragm ring is readily accessible through the large door on the left side of the ENLARG-OR-PRINTER. (See Fig. 18). *In all cases, f.4 is recommended as the widest aperture to be used for enlarging.*

Move the left hand switch from the "on" to "off" position.

Usually a test strip will now be made to determine the correct exposure for the print. See page 71 of your book, "Photographic Enlarging."

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*



*Note: If borders wider than 1" (the width of the masking blades) are desired, all exposed areas of the platen glass outside the masking blades should be covered to assure clear white borders. Handy paper strips that serve this purpose ideally may be cut from the black protective sheets that accompany each package of sensitized paper. Bits of Scotch Tape will hold them neatly in position.*

With the correct exposure determined from the test strip, place the sensitized paper in position on the top platen glass with the emulsion side down. The procedure illustrated in Fig. 5 is recommended. You will find that the white center lines on the masking blades permit a nicety of border alignment.

Bring the top platen from its upright position into contact with the sensitized paper. When the platen is in full contact with the paper, additional downward pressure on Platen Handle L (Fig. 5) actuates the automatic switch, completing the circuit and lighting the projection lamp. Hold the handle firmly to the platen for the required exposure (best determined through the use of an interval timer or other accurate timing device).

At the conclusion of the exposure, lift the top platen to its upright position, remove the sensitized paper from the platen, and develop the print—preferably in accordance with the instructions which accompany each envelope of sensitized paper.

The above procedure applies to the making of all enlargements on sensitized paper 8"x10" in size or smaller. Should you wish to use sensitized paper larger than 8"x10", obtaining on it a picture 8"x9¼" (the exact size of the top platen opening) or smaller, the procedure is described below.

### 8" x 9¼" or Smaller Picture Areas on Paper Larger Than 8" x 10"

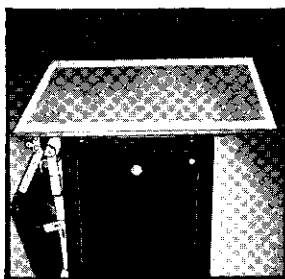


Figure 20

For obtaining an 8"x9¼" or smaller picture on large sheets of paper, it is first necessary to move the platen top out of the plane of the platen glass. This is accomplished by exerting outward pressure on each of the two Spring Locking Lugs WW (Fig. 19), which pressure will permit sliding the hinged platen top toward the rear of the ENLARG-OR-PRINTER. If each side is released individually and moved slightly toward the back of the ENLARG-OR-PRINTER, the operation

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

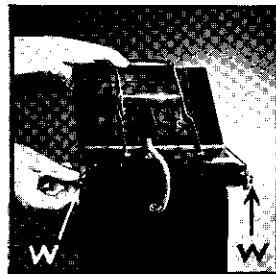


Figure 19

is materially simplified and the top platen can then be laid back parallel to the rear vertical side of the ENLARG-OR-PRINTER as illustrated in Fig. 20.

Place the negative in position and focus on the focusing screen as previously described. If the picture dimensions are to be smaller than 8" x 9¼", move the masking blades into the desired position. Cover any exposed areas of platen glass (outside the masking blades) with the black paper strips suggested on page 14.

In this procedure, the top platen is not used to hold the paper flat during the exposure. However, this is readily accomplished by placing on the paper a sheet of plate glass or other flat weight (See Fig. 20).

With the large sheet of sensitized paper placed emulsion side down in the desired position over the masks, the exposure is made (with either the "dim" or "bright," determined by your test strips) by moving the left hand switch from the "off" to the "on" position for the required time interval. To terminate the exposure, move the switch back to the "off" position.

With a bit of practice beautiful results suitable for framing or for salon exhibition may be made in this way. The picture area can be attractively set off from the surrounding paper by embossing, ruling or through other applications of the art outlined on page 186 of your book, "Photographic Enlarging."

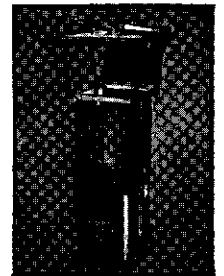


Figure 21

### Making 11" x 14" Enlargements

For those who wish to conveniently make 11x14" enlargements, there is provided as an accessory for the ENLARG-OR-PRINTER the Extension Top (Fig. 21). Since 11x14" enlargements are normally full size, the masking device has been dispensed with.

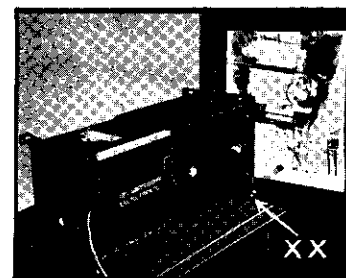


Figure 22

The procedure for making these enlargements is identical with that described heretofore. The top platen holds the paper flat during the exposure which is controlled by the automatic switch, or in the case of very long exposures, by the left-hand switch (as in the case described where 8" x 9¼" or smaller picture areas are obtained on paper larger than 8"x10").

### Giant Enlargements

Through the use of a wall easel or other means of firmly attaching a sheet of sensitized paper as large as the desired print is to be, giant en-

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

largements limited in size only by the quality of the negative are easily made with your ENLARG-OR-PRINTER.

*The procedure:* Remove the masking blades from the ENLARG-OR-PRINTER by unscrewing the two knurled nuts holding each to the under side of the top platen. Remove the top platen glass.

Next, lay the ENLARG-OR-PRINTER on its back on a table or bench, permitting it to be supported by the two back feet and the two platen Stops XX (See Fig. 22).

The top platen should lay forward snugly against the platen stops. The platen is now perpendicular to the table or bench. See that the easel or paper support is similarly perpendicular and, therefore, parallel to the negative in the ENLARG-OR-PRINTER, preventing any unwanted distortion of parallel lines.

The selected negative is now positioned in the negative holder and the unit inserted into the ENLARG-OR-PRINTER. Focus upon a sheet of white paper, cut to the approximate size of the proposed enlargement, and mounted to the easel or support at exactly the position the sensitized paper is to occupy. *The emulsion side of the paper should face the ENLARG-OR-PRINTER.*

The exposure is controlled with the left hand switch.

Means of handling and processing giant enlargements are described on page 36 of your book, "Photographic Enlarging."

## Manipulations

### Dodging

In the course of making enlargements, paper negatives, and in other applications, there are occasions when dodging will improve the final result. With the ENLARG-OR-PRINTER, several methods of dodging are available. Where direct dodging is desirable, it is readily accomplished by means of the large door provided on the left side of your ENLARG-OR-PRINTER (See Fig. 23). This door is unlatched for opening by turning the small button Y (Fig. 7) in a counter clockwise direction.

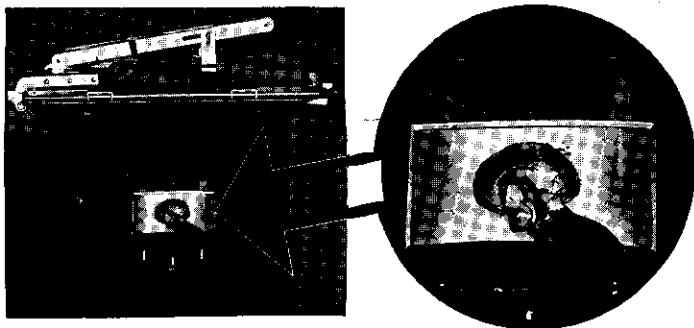


Figure 23

For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.

A tuft of cotton, or a dodging paddle of cardboard, your hand, or other means of dodging described on page 77 of your book, "Photographic Enlarging," may readily be used with your ENLARG-OR-PRINTER, since the large door affords ample room for every manipulation. The dodging mirror reflects upward the image falling on the sensitized paper, simplifying dodging by means of the hand or dodging paddle. The mirror may be tipped to any convenient angle for varying degrees of enlargement. This dodging mirror makes it possible to dodge contact prints as well as projection prints.

Your book, "Photographic Enlarging," describes a handy means of eliminating actual "dodging" by controlling the results through staining the negatives with Coccine or other suitable dye. (See page 150). Other methods are outlined in the reprint from the Photo Art Monthly, which is attached to the back of this manual.

### Correcting or Creating Distortion

The platen top of your ENLARG-OR-PRINTER is provided with a swing of plus or minus six degrees (6°). When negatives are encountered which reflect distortion, the use of the swing top permits correction of such distortion. On the other hand, when unusual effects or results are desired, negatives without distortion may be distorted to make short people taller, long faces shorter, to accentuate angles, etc.

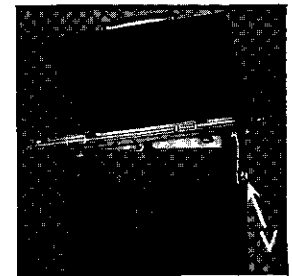


Figure 24

The top is self-centering for negatives requiring no correction, and may be locked at any desired position with Lock Nut V. (See Fig. 24).

### Making Contact Prints

With the ENLARG-OR-PRINTER it is easy to make contact prints in any size up to 8"x10" (or up to 11"x14" when the accessory extension top is in use.)

*The procedure:* Contact prints may be made with or without the lens. It is recommended, however, that the lens be removed for this purpose.

Place the selected negative on the top platen glass, allowing the masking blades to hold it flat as illustrated in Fig. 16. The contact paper, emulsion side down, is placed in position over the negative (dull side up) just as we previously placed it in position for the enlargement. (See Fig. 5.) The ruby lamp aids in the proper placement of the negative and sensitized paper. The paper is held in perfect register when the top platen is brought to bear upon it. The exposure is effected when the top platen handle is fully depressed (the procedure identical with that prevailing for the making of enlargements).

For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.

The exposure required as well as the grade of paper best suited for each print may often be judged. Initially, in order to acquaint oneself with the high efficiency of the illumination system of the ENLARG-OR-PRINTER, it is recommended that test strips be made. Depending on the density of the negative, the illumination may be set for either "Bright" or "Dim."

## Greeting Cards and Announcements

The ENLARG-OR-PRINTER simplifies the making of quantities of greeting cards, announcements, or prints from a selected negative. Maximum speed and convenience are provided by the advanced construction of the instrument.

Chapter XIV of your book, "Photographic Enlarging" deals at greater length with the proven methods and procedure. It also discusses composite negatives which so often lead to effective greeting cards and announcements. You will observe how naturally your ENLARG-OR-PRINTER serves in preparing such negatives. And, once completed, they may be printed by *contact* with your ENLARG-OR-PRINTER at material savings of time.

## Making Lantern Slides

For those interested in making lantern slides, the ENLARG-OR-PRINTER holds a particular invitation. Slides may be made with your instrument either by projection or by contact and from a miniature negative or any negative smaller than the standard lantern slide size.

*Procedure:* Place the negative in the negative holder (or in the strip film holder, if you are working with strip film). Focus the image sharply on the screen to the proportions of the selected lantern slide mask.

Remove the focusing screen. Shut off the illumination with the left hand switch. Place the sensitized lantern slide plate over the masking blades which will have been set to the proper position during the focusing procedure.

Because of the thickness of the lantern slide plate, the top platen is not used to actuate the exposure. Use the left hand switch, setting it to the "on" position for the desired exposure.

When lantern slides are to be made by contact rather than projection, follow the procedure described under the heading, "Making Contact Prints," page 17.

The making and treatment of lantern slides is described in detail in Chapter XVIII of your book, "Photographic Enlarging."

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

## The Enlarg-or-Printer as a Retouching Desk

Oft times you may wish to perform retouching operations on either negatives or prints. This procedure is described in Chapters 11 and 14 of your book, "Photographic Enlarging."

The ENLARG-OR-PRINTER is a natural retouching desk. With lens and lensboard removed and the top platen unlocked and swung out of the way, the top platen may be tilted toward the operator as illustrated in Fig. 25. The operator thus has the advantages of: working on a plate glass base; with either of two light intensities available behind the print or negative; and working at a normal "desk" angle that makes retouching easier.

## Making Paper Negatives With Your ENLARG-OR-PRINTER

Since enlarged paper negatives are usually made from smaller negatives in order that desirable retouching may be performed on them, the combination features of the ENLARG-OR-PRINTER prove invaluable.

*The procedure:* From your smaller negative, make a positive enlarged print by projection in the usual manner and on the paper selected or suggested in Chapter XVI of your book, "Photographic Enlarging."

Before making your paper negative from the positive enlargement, you may wish to perform certain retouching on the positive. At this point, the "retouching table" feature of your ENLARG-OR-PRINTER is brought into full use, since the controlled illumination afforded is ample to render the print transparent. (Actual retouching of a paper positive is illustrated in Fig. 25.)

When the desired retouching, if any, has been completed on the back of the positive print, a paper negative may be made from the print *by contact*. (See page 17.)

This paper negative, too may be "worked up" along the lines described in the Chapter on *Paper Negatives* in your book, "Photographic Enlarging."

From this first paper negative you may wish to make another positive and from it another paper negative—performing additional retouching on each. The completeness of the ENLARG-OR-PRINTER for all these manipulations is evident.

When the final paper negative is to your liking, any desired number of prints can be easily made by the usual contact method.

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

## Making Color Prints With Your ENLARG-OR-PRINTER

If you have made a color transparency in your camera, the necessary three-color separation negatives may be made by contact or projection, placing over the lens or lens opening the filter required by the process you are using. These three-color separation negatives in turn may be projected to any desired size making the required three images, which may be processed by the well-known Eastman Wash Off Relief Process or the Defender Chromatone Process.

### Service Department

Your ENLARG-OR-PRINTER has built-in features and advantages which assure outstanding results in use. When specific problems relating either to procedure or methods arise, write the Service Department. It is maintained as a clearing house for the dispensation of photographic data—available at all times to all users of Graflex equipment. It is your department. You are invited to use it.

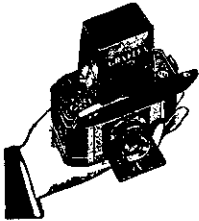


*Figure 25*

*For your convenience, all illustrations are repeated and grouped together on pages 10 and 11.*

# GRAFLEX Favorites

*Choose your next camera from these Graflex favorites. You're sure of sharp, sparkling negatives that make ideal contact prints and superb enlargements.*



*"Just a Handful"*

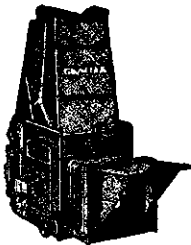
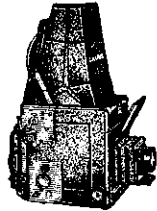
## National GRAFLEX Series II

Small, efficient, economical. Graflex Focal Plane Shutter provides speeds from 1/30 to 1/500.

Accessory self-timer provides additional speeds as slow as ten full seconds. Equipped with 75 mm. *f*.3.5 B & L Tessar Lens. The many accessories include an interchangeable 140 mm. *f*.6.3 B & L Telephoto Lens. Makes ten pictures on 8-exposure film rolls. Picture size:  $2\frac{1}{4} \times 2\frac{1}{2}$ .

## R. B. Series B GRAFLEX

Reliable, practical, popular. Focal plane shutter gives 24 speeds from 1/10 to 1/1000 second and any "time" desired. Kodak Anastigmat *f*.4.5 lens. Uses cut film, roll film, plates, film packs. Made in sizes  $2\frac{1}{4} \times 3\frac{1}{4}$ ,  $3\frac{1}{4} \times 4\frac{1}{4}$ , 4x5. Also made without Revolving Back in 5x7 size.

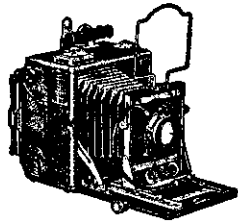


## R. B. Series D GRAFLEX

Deservedly popular because of its all around utility and ability. Same shutter as Series B and provides same choice of film and plates. Removable lens board permits wide selection of lenses. Revolving Back is standard equipment. Made in sizes  $3\frac{1}{4} \times 4\frac{1}{4}$ , 4x5.

## SPEED GRAPHIC

With interchangeable lenses; generous bellows extension; rising-falling front; drop bed; Focal Plane Shutter (1/10 to 1/1000 sec.); with Graflex or Graphic Back to use film, plates, or packs; and, with a built-on Range Finder if you want it. Certainly a camera to be considered. Made in sizes  $3\frac{1}{4} \times 4\frac{1}{4}$ , 4x5, 5x7.



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