

LIMITED ONE YEAR WARRANTY ON DA-LITE OVERHEAD AND OPAQUE PROJECTORS

(Applicable in U.S.A., outside U.S.A. see local distributor)

Da-Lite projectors (except lamps) are warranted against defects in material and workmanship for a period of one (1) year from the date of purchase by the original purchaser provided they are properly operated according to Da-Lite's instructions and are not damaged due to improper handling or treatment after shipment from the factory.

This warranty does not apply to equipment showing evidence of misuse, abuse, or accidental damage, or which has been tampered with or repaired by persons other than authorized Da-lite personnel.

Da-Lite's sole obligation under this warranty shall be to repair or to replace (at Da-Lite's option) the defective part of the merchandise. Returns for service should be made to your Da-lite dealer. If it is necessary for the dealer to return the machine or part to Da-Lite, transportation expenses to and from Da-Lite are payable by the purchaser and Da-Lite is not responsible for damage in shipment. To protect your self against damage or loss in transit, insure the product and prepay all transportation expenses. Allow at least six weeks for correction of the defect.

THIS WARRANTY IS IN LEIU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING

WARRANTIES AS TO FITNESS FOR USE AND MERCHANTABILITY. Any implied warranties of fitness for use, or merchantability, that may be mandated by statute or rule of law are limited to the one (1) year warranty period. This warranty gives you specific legal rights, and you may also have other rights which vary from state-to-state. NO LIABILITY IS ASSUMED FOR EXPENSES OR DAMAGES RESULTING FROM INTERRUPTION IN OPERATION OF EQUIPMENT, OR FOR INCIDENTAL, DIRECT, OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

In the event that there is a defect in materials or workmanship of our audio-visual product, you may contact our Customer Service Department at P.O. Box 137, Warsaw, Indiana 46580 (219/372-1323).

IMPORTANT: THIS WARRANTY SHALL NOT BE VALID AND DA-LITE SHALL NOT BE BOUND BY THIS WARRANTY IF THE PRODUCT IS NOT OPERATED IN ACCORDANCE WITH DA-LITE'S WRITTEN INSTRUCTIONS.

Keep your sales receipt to prove the date of purchase and your original ownership.

IMPORTANT! KEEP THIS INFORMATION HANDY FOR FUTURE REFERENCE

(Applicable in U.S.A., outside U.S.A. see local distributor)

SERVICE INFORMATION

A Return Authorization is required for ALL service work, whether the unit is in or out of warranty. Da-Lite will need the model and serial number in order to issue the Return Authorization.

If the unit is an obsolete model, you will be advised before you ship the unit, whether or not Da-Lite can make the repair.

Address your request for a Return Authorization to: Customer Service Department. Da-Lite Screen Company, Inc., P.O. Box 137, Warsaw, Indiana 46580 or phone (219) 372-1323 FAX #219-267-7804.

Should you need service for your Da-Lite equipment after the warranty has expired, contact your local dealer. If it is necessary for the dealer to return the machine or part to Da-Lite, transportation expenses to and from Da-Lite are payable by the purchaser and Da-Lite is not responsible for damage in shipment. Pack the product in a sturdy box with plenty of protective packing material. To protect your self against damage

or loss in transit, insure the product and prepay all transportation expenses. Da-Lite will refuse collect shipments. Allow at least six weeks for correction of the defect.

ENCLOSE complete information showing your name and address, what is wrong with the equipment, and the return shipping address. Tape the information to the equipment to be sure it does not get separated during repair.

ADDRESS the package to the address shown on your Return Authorization.

CHARGES. If Da-Lite determines it will cost over 33% of current suggested retail price, you will be contacted for written approval of the estimated charges before the repair is made.

PAYMENT. When unit is repaired, it will be returned C.O.D. for cost of repair and shipping charges unless other arrangements have been made in advance.

INSTRUCTION BOOK FOR DA-LITE VU-LYTE IV OPAQUE PROJECTOR



DA-LITE SCREEN COMPANY, INC.
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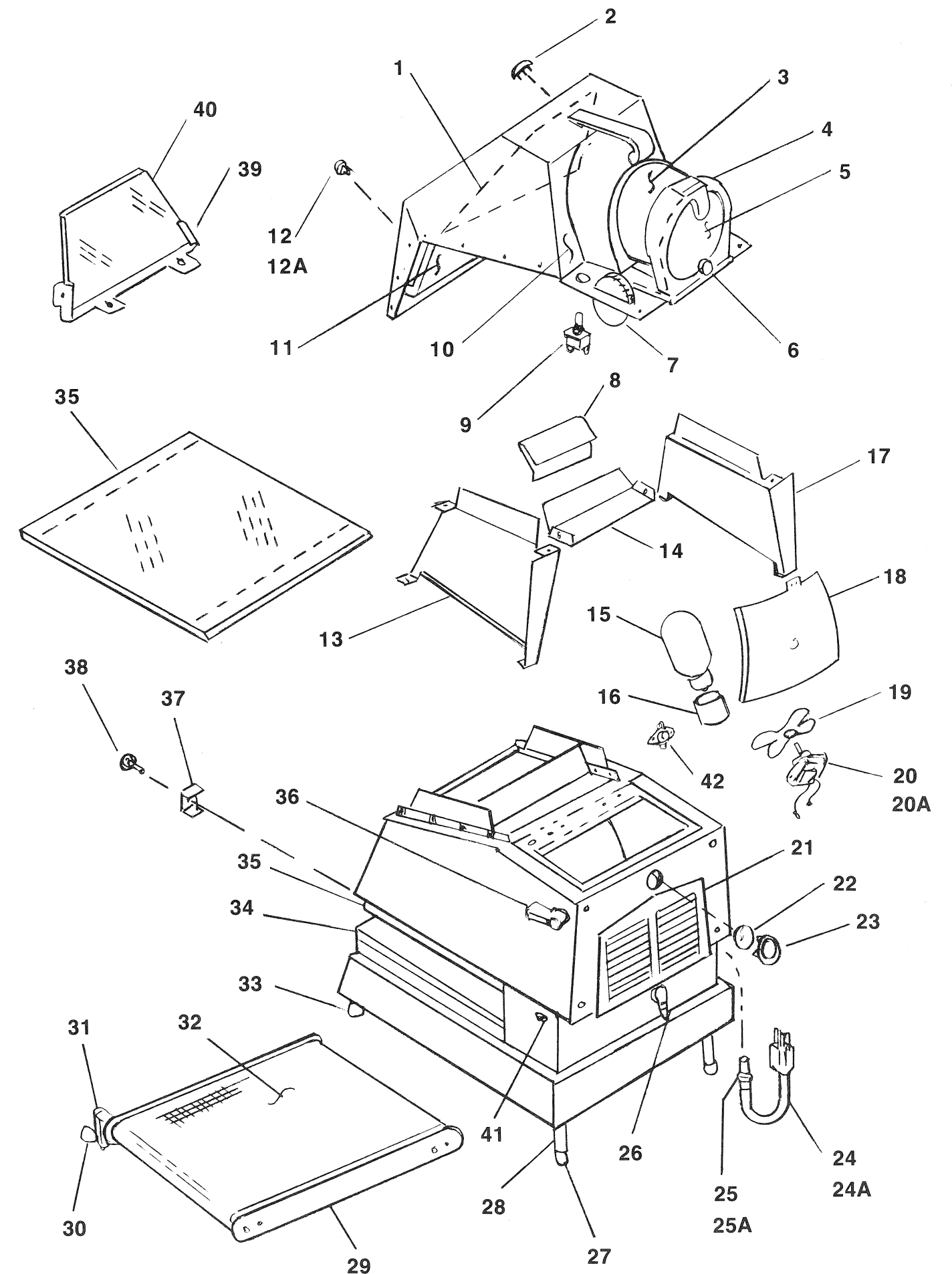
IMPORTANT SAFEGUARDS[©]

When using your photographic equipment, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions.
2. Close supervision is necessary when any appliance is used by or near children. Do not leave appliance unattended while in use.
3. Care must be taken as burns can occur from touching hot parts.
4. Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged—until it has been examined by a qualified serviceman.
5. Do not let cord hang over edge of table or counter or touch hot surfaces.
6. If an extension cord is necessary, a cord with a suitable current rating should be used. Cords rated for less amperage than the appliance may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
7. Always unplug appliance from electrical outlet when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
8. Let appliance cool completely before putting away. Loop cord loosely around appliance when storing.
9. To protect against electrical shock hazards, do not immerse this appliance in water or other liquids.
10. To avoid electric shock hazard, do not disassemble this appliance, but take it to a qualified serviceman when some service or repair work is required. Incorrect reassembly can cause electric shock hazard when the appliance is used subsequently.

SAVE THESE INSTRUCTIONS

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VU-LYTE IV REPLACEMENT PARTS LIST

REF. NO.	DESCRIPTION	DA-LITE NO.
1	Mirror - Front Surface	90-1472-140
2	Plug Button	90-1396-640
3	Lens - 5-3/8" Dia. x 18" F	90-1466-540
4	Clamp - Lens	90-1015-600
5	Lens Cover Assembly	98-1015-240
6	Knob - Lens Cover	90-1390-740
7	Gear Assembly - Focus	98-1014-740
8	Shield - Center	90-1022-940
9	Switch - Toggle	90-1442-840
10	Lens Sleeve & Angle Assembly	98-1017-741
11	Reflector - Rear Secondary	90-1018-140
12	Knob - Rear Door	90-1394-940
12A	Latch - Rear Door	90-1394-840
13	Reflector - Side Secondary	90-1019-142
14	Shield - Light	90-1019-240
15	Lamp - Projection 115V, 1000W "DRB"	43-9510-400
16	Socket - Lamp	90-1448-240
17	Reflector - Side Secondary	90-1019-141
18	Reflector - Parabolic	90-1470-540
19	Impeller	90-1446-540
20	Motor Assembly, 115V, 60 Hz	98-1014-640
20A	Motor Assembly, 220V, 50 Hz	98-1015-940
21	Grille - Blower	90-1014-040
22	Window - Pointer	90-1474-340
23	Plug Button	90-1396-240
24	Cord Set Assembly - 120V	98-1143-340
24A	Cord Set Assembly - 220V	98-1021-600
25	Strain Relief 120V	90-1434-100
25A	Strain Relief - 220V	90-1434-300
26	Knob - Elevating Leg	90-1392-540
27	Foot - Front	90-1397-143
28	Leg - Elevating	90-1143-200
29	Feedomatic Assembly	43-9512-000
30	Crank Assembly	98-1002-040
31	Screw - Crank Retaining	90-1305-040
32	Belt - Feedomatic	90-1036-140
33	Foot - Rear	90-1397-043
34	Platen Assembly	98-1143-940
35	Pressure Plate	43-9510-200
36	Handle - Pointer	90-1019-841
37	Latch - Undercarriage	90-1142-740
38	Knob - Retaining	90-1391-840
39	Heat Filter Attachment(Complete)	43-9510-300
40	Glass - Heat Filter	90-1473-840
41	Screw - Adjusting	90-1326-400
42	Thermal Switch	90-1444-040

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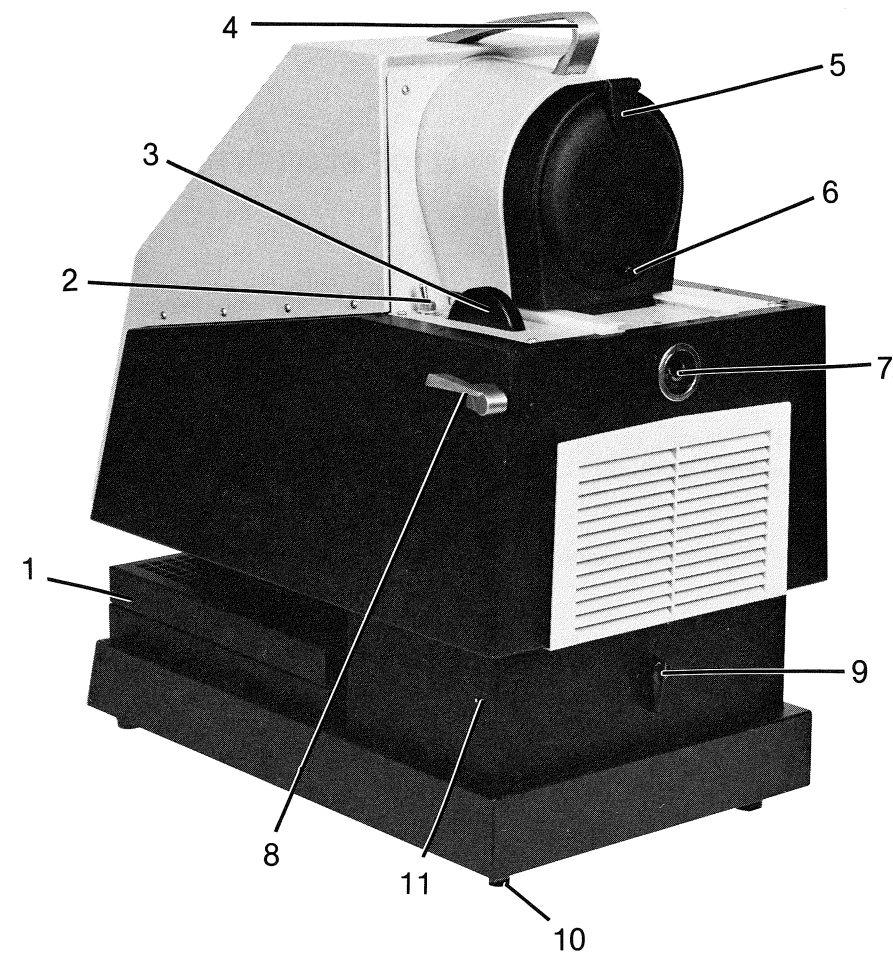


Figure 1 — Vu-Lyte IV with Principal Parts Identified

- | | |
|----------------------|--------------------------------|
| 1. Vacuumatic Platen | 6. Cap Knob |
| 2. Switch | 7. Pointer Window |
| 3. Focusing Wheel | 8. Pointer Handle |
| 4. Carrying Handle | 9. Elevating Leg Clamping Knob |
| 5. Lens Cap | 10. Elevating Leg |
| | 11. Adjusting Screw |

locking knob; however, the locking action is individually adjustable for each leg as follows:

- (a) Release Elevating Lock Handle (9, Fig. 1) by turning handle counterclockwise.
- (b) Turn Adjusting Screw (11, Fig. 1) with a 5/32" Hex Key clockwise to tighten and counterclockwise to loosen the leg lock.

Caution: Try elevating lock after each 1/4 turn on the adjusting screw to determine if further adjustment is required.

REPAIRS

C. REPLACING THE FRONT SURFACE MIRROR

Make sure that the rear door is latched. Turn the projector over on its back, and then open the rear door. Remove the two screws which fasten the front surface mirror retaining strip (1, Fig. 9). The mirror can then be removed from the projector. Insert the new mirror and replace the mirror retaining strip.

D. REPLACING THE PARABOLIC REFLECTOR

Open the rear door and remove the lamp. Remove the screws which hold the reflector (2, Fig. 9). The reflector can be removed and the new one inserted following a reverse procedure.

E. REPLACING THE SWITCH

In order to replace the switch, remove the Lens Deck as described in Pointer Adjustment Section, starting with instruction (b) through (e). After the Lens Deck has been removed, unscrew the switch locking nut (2, Fig. 7) and push the switch handle down through the mounting hole in the deck mounting plate.

Replace the old switch by removing the wires one by one and immediately connecting them to the corresponding lug on the new switch.

Lock the replaced switch into its mounting hold with the switch locking nut and reassemble the Lens Deck to the projector.

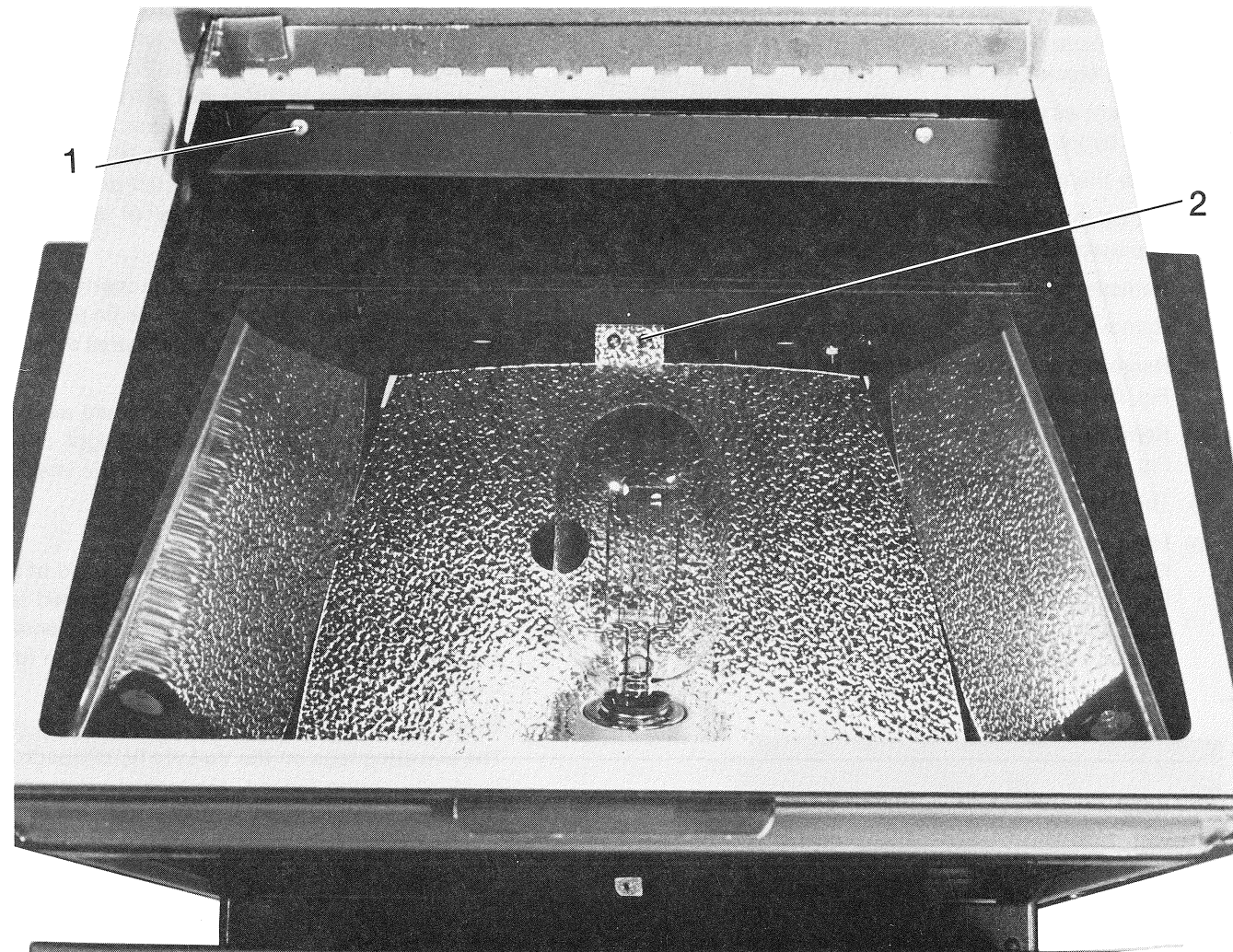


Figure 9

1. Mirror retaining screws 2. Reflector retaining screws

SECTION I

DESCRIPTION

The Vu-Lyte IV is an improved opaque projector designed for superior projection of large size opaque copy.

The Vu-Lyte IV incorporates in its design some of the latest developments in function and style. Its performance and ease of handling make opaque projection simple and convenient.

The standard Vu-Lyte IV is designed around a special projection lens having an 18" focal length, 5" diameter clear aperture. A permanently attached lens cover is provided to protect the lens against dust and dirt. Illumination is provided by a 1000 watt, T-20 medium prefocus base projection lamp working in conjunction with a parabolic reflector and secondary mirrors designed to provide maximum and even illumination over the copy area.

Spring Loaded Legs counterbalance the weight of the projector so that it can easily be adjusted to the desired height. These legs function independently but are controlled by a single centrally located lock.

The undercarriage is mounted on parallel arms counterbalanced with springs, but actuated in such a way that the undercarriage is infinitely adjustable within its range, and will remain in any position to which it has been set.

The Vu-Lyte IV offers two methods of handling copy, the Vacumatic platen and the Feedomatic, both mounted on the undercarriage.

The Vacumatic platen provides a projection platform for books, magazines and objects as well as paper sheets.

The platen is removable for insertion of the Feedomatic, if desired, and for the projection of extremely thick objects.

The Feedomatic is available as an optional accessory consisting of a conveyor belt on which copy is held by a difference in air pressure created by the blower system. The belt conveys copy into and out of the projector by operation of a crank. This offers many advantages: the platen need not be lowered; the room is not flooded with light every time new copy is introduced, the presentation is continuous, new copy being introduced as old copy is removed, continuous copy in roll form can be used, panoramic effects can be obtained and any size up to 10" x 10" copy is handled without framing or mounting, etc.

The Vu-Lyte IV projector is equipped with Pointex, a built-in optical pointer of new streamlined design, to permit objects projected on the screen to be clearly pointed out. The pointer projects a bright image of an arrow on the screen, and the position of this arrow is controllable by a single knob. No separate light source is employed because Pointex obtains its light from the projection lamp.

A 10 foot 3 wire grounded power cord is permanently attached to the projector providing electrical energy to the lamp and a cooling motor. The motor and fan provide a constant flow of cooling air over the copy and light source and creates a suction type copy holddown. A three position switch provides for Projector "On", Projector "Off", and, in its middle position, "Fan Only".

The following accessories are also available for Vu-Lyte IV, a pressure plate and a heat reflecting filter between the lamp.

In designing the Vu-Lyte IV, special consideration has been placed on ease of maintenance, cleaning the optical elements, and changing the lamp. In addition, the rear door provides a means for placing large physical objects into the projector and manipulating them during projection, if desired.

The Vu-Lyte IV is shipped completely assembled ready to use.

Figure 1 shows the Vu-Lyte IV with the principal parts identified.

SET UP AND OPERATION

SET UP

Unlike transparency projectors (which handle transparencies like lantern slides, film strips, movies, etc.), an opaque projector obtains its light by reflection. Since the reflectivity of the copy is intrinsically very poor, it is difficult to obtain brilliant screen images from opaque materials.

With the Vu-Lyte IV, it is no longer necessary for the room to be absolutely dark. However, it is still preferable that the room be made as dark as possible and that the screen be shielded from direct light, particularly sunlight. If the room cannot be adequately darkened, then the screen image should be kept as small as practical, as this will increase the intensity of illumination on the screen. In general, the size of the image should be suited to the projection distance from which it is used. The relationship should be such that the entire screen can be seen without moving the eye excessively from side to side. The use of a large screen image and short viewing distance results in eye fatigue and loss of attention.

Set the projector on a suitable stand in the projection room at the desired distance. The stand should be high enough to project the image over the heads of the audience. Do not use a low table which requires excessive extension of the elevating legs, as this will produce a distorted screen image which will be impossible to focus sharply.

Table 1 shows the size of screen image which can be obtained.

VU-LYTE IV PROJECTION TABLE

Projection Distance (Feet)	6	8	10	12	14	16
Size of Screen Image from 10" x 10" copy (Inches)	36	48	60	74	86	100

To increase the range of magnification on the Vu-Lyte IV, loosen the lens clamping screw. For large magnification, push the lens back into its mount approximately $\frac{5}{8}$ ". To reduce magnification, pull the lens out approximately 1". **Caution:** Be sure the lens is clamped by at least $\frac{3}{8}$ ".

Check the nameplate of the Vu-Lyte IV to make sure it will operate on the type of current available. Do not connect a unit marked A.C. to direct current.

Open the lens cover (5, Fig. 1). Turn the switch (2, Fig. 1) to "on" position. Lower the platen by moving the undercarriage actuating lever, (1, Fig. 4) to the left. Place some copy on the Vacumatic platen (bottom of the copy toward the screen) and focus it on the screen. To focus the Vu-Lyte IV, simply revolve the focusing wheel (3, Fig 1) until a sharp image is obtained on the screen. Adjust the screen laterally by swinging the projector to one side or the other. To adjust the screen image vertically, release the leg lock by turning the knob (9, Fig. 1), counterclockwise. Adjust the projector until the screen image is centered properly and lock in position by turning the locking knob clockwise.

OPERATION

When the Vu-Lyte IV has been set up as described above, it is ready for the insertion of the material to be projected and the operation of the pointer.

The Vu-Lyte IV projector has a very efficient cooling system. In order to provide additional protection to temperature sensitive materials, such as electrocardiogram paper, gross physical specimens, and other delicate materials, or for thick materials that are to be left in the projector for long periods of time, it is advisable to use a heat filter attachment.

A. Projection with the Vacumatic Platen

Lower the Platen by moving the undercarriage actuating lever (1, Fig. 4) to the left. Place the material on the Platen and move the lever to the right as far as it will go.

B. Projection with the Feedomatic

The Feedomatic attachment provides a means for inserting and removing the copy without lowering the platen. To operate the Feedomatic, insert the material into the space between the bottom of the housing and the top of the Feedomatic belt on the left side (as you face the screen). Material must be

inserted with the bottom edge toward the screen. When the material has been inserted approximately $1\frac{1}{2}$ ", turn the handle clockwise. The pressure will hold the material down to the conveyor belt and the conveyor belt will carry it into projection position. Stop turning the crank when the material has been centered laterally. When the next copy is to be inserted, simply proceed as previously described.

Insertion of one piece of copy automatically removes the previous copy. If copy trays are used, the copy will drop into the tray as it comes off of the Feedomatic belt.

C. Projecting Books and Magazines

Books and magazines are most easily projected by lowering the platen and placing the book or magazine on the platen and raising it to projection position. Projection of this type of material, as well as photographs, which otherwise, would tend to curl, is best accomplished by using the pressure plate. (This is inserted as described in Accessories). Slender books or magazines may also be projected with the Feedomatic installed. The material to be projected is placed on the Feedomatic belt, (or on the platen) raising the undercarriage as high as it will go.

D. Projecting thick physical objects

Thick physical objects can also be projected by placing them on the Feedomatic or on the copy platen. Objects which are too thick to be inserted in the space provided by lowering the undercarriage can be inserted through the rear door. Although such thick physical objects can be projected, it is, of course, understood that theoretically only one particular plane of the object can be brought to an exact focus. However, it is frequently desirable to project thick objects and focus sharply on the desired part even though other parts may be out of focus.

Note: Extra space is obtained when projecting books or thick physical objects by removing the Feedomatic and/or the Vacumatic Platen.

3. Adjustment of the Optical Pointer:

The Vu-Lyte IV Pointer operates as follows: Light from the projection lamp comes through the clear aperture of the reflector and passes through the arrow aperture plate, which is a vertical plate mounted below the horizontal plate containing the switch (1, Fig. 8) and strikes the pickup mirror (2, Fig. 8). This mirror deflects the light so that it passes through the tube (3, Fig. 8) which contains a lens. The light then strikes the movable mirror (4, Fig. 8) by means of which the image can be moved to any position on the screen.

The adjustment of the pointer consists, essentially, of obtaining the correct lateral position and angular orientation of the pickup mirror, and the proper positioning of the arrow aperture plate in the path of light.

Angular adjustment of the pickup mirror (2, Fig. 8) is made by loosening screw (6, Fig. 8), pivoting the mirror on screw (5, Fig. 8) and by revolving the tube (3, Fig. 8) after loosening screw (7, Fig. 8).

Adjustment of the lateral position of the pickup mirror is made by an axial shift of the tube in its mounting bracket (with screw 7 loose).

Adjustment of the arrow aperture plate position is made by loosening the screws (8, Fig. 8).

To make the adjustment proceed as follows:

- (a) Set up the projector so that a 10" x 10" copy is projected to a 5' x 5' screen image.
- (b) Remove screw (3, Fig. 6) from top handle.
- (c) Remove jam nut (2, Fig. 6) from switch.
- (d) Remove 6 oval head and 1 flat head screws (1, Fig. 6) from Lens Deck Assembly.
- (e) Remove Lens Deck Assembly as shown in Fig. 7.
- (f) Turn the switch to "On" position.
- (g) Look at the light striking the pickup mirror (2, Fig. 8), and adjust the arrow aperture plate (1, Fig. 8) so that the hottest part of the light beam passing through the arrow aperture strikes the center of the mirror.

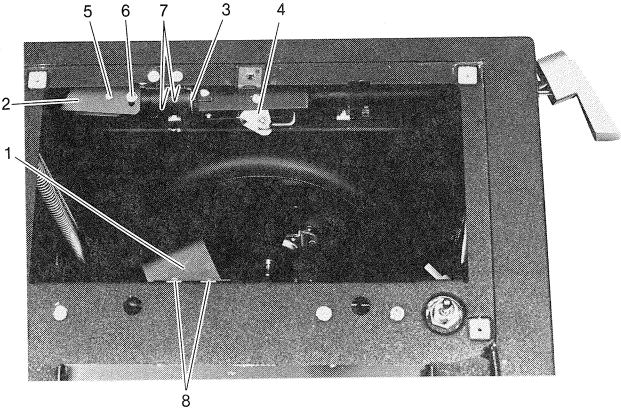
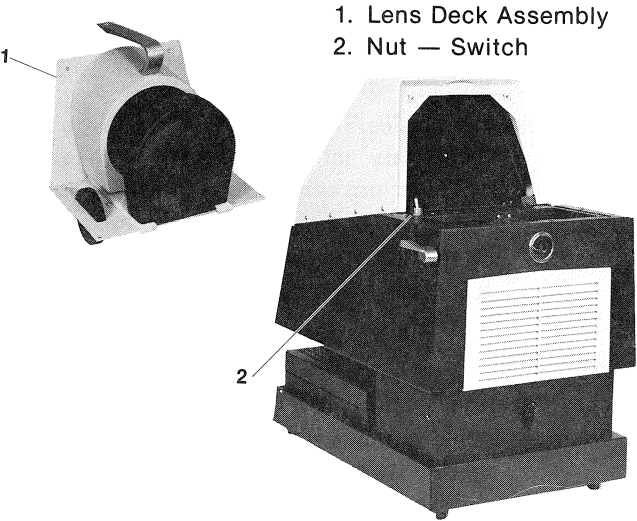


Figure 8 — Pointer System

- 1. Aperture Plate
- 2. Pickup Mirror
- 3. Tube
- 4. Movable Mirror
- 5. Pivot Screw
- 6. Locking Screw
- 7. Tube Locking Screws
- 8. Aperture Plate Screws

Figure 7 — Lens Deck Removed



- 1. Lens Deck Assembly
- 2. Nut — Switch

- (h) If a powerstat is not being used to lower the voltage, then place a dense filter over the pointer window to protect your eyes from the bright light. Look into the pointer window (7, Fig. 1). You will be looking at the movable mirror (4, Fig. 8) and by adjusting it, you will be able to look down the tube (3, Fig. 8). Adjust the pickup mirror (2, Fig. 8) until the arrow appears in the center of the tube. If the arrow is too high or too low, revolve the pointer tube (3, Fig. 8) until it is centered. If the arrow is displaced to the left or right, then adjust the angular position of the pickup mirror (2, Fig. 8).

If all the adjustments have been properly made, a bright, sharp image of the arrow can be projected anywhere within the 5' x 5' screen area obtained in (a) above.

If a satisfactory image is not obtained all over, observe the screen while making slight lateral movement of the aperture plate until the image is satisfactory.

4. Feedomatic Belt:

Loosen the screws (4, Fig. 4) on each end of the idler roller. Move idler roller for desired belt tension and tighten screws. (Note: Equal tension should be maintained on both ends of the idler roller).

5. Elevating Legs:

The elevating legs on the Vu-Lyte IV, although individually spring loaded, are locked by a single

If the first condition is not met, it means that one side of the mirror is further away from the front than the other side and the result on the screen will be that one vertical edge of the screen image will be longer than the other.

If the second condition is not met, then the two horizontal edges of the screen image will not be of the same length. In either case, when one portion of the screen is brought to a sharp focus, other portions will not be in focus.

To adjust the front surface mirror, it is necessary to turn the mounting nuts and keep refocusing the lens until the proper adjustment is obtained, judging by the squareness of the screen image and the over-all sharpness of focus.

Set up the projector with the base level (elevating legs retracted). Insert copy, such as a printed page of a magazine. Turn on the switch and focus the copy as sharply as possible.

- If the copy can be focused sharply over the entire screen area, the mirror is properly adjusted. Do not attempt to readjust it.
- If the copy can be focused sharply across a horizontal area, but at the same time is not sharp from top to bottom, then the lateral adjustment is satisfactory and only vertical adjustment is necessary. Proceed as follows:

- Remove the three plug buttons (1, Fig. 5) which cover the slotted adjusting nuts.

- Focus the bottom portion of the screen sharply.

- Turn the bottom nut clockwise and observe the screen. The portion of the screen not in focus will either get better or worse.

- If it gets better, continue the adjustment, continually refocusing the lens, until the screen is sharp all over. If the nut reaches the end of its travel before the screen image is completely corrected, begin turning the upper nuts counter-clockwise, working first one, then the other, one-half turn at a time, until the correct adjustment is reached.

Caution: If any of the nuts are turned counter-clockwise too far, the mounting screws will become completely disengaged and the mirror frame will no longer be supported. From the completely tightened position, the nut can be backed off (turned counter-clockwise) $\frac{3}{8}$ ".

- If turning the bottom nut clockwise makes the adjustment worse, then begin turning the upper two nuts clockwise, working first one, then the other, one-half turn at a time, until the best possible adjustment is reached. If, after these upper nuts have been turned clockwise as far as they will go, the picture is still not perfect, then begin turning the lower

nut counter-clockwise slowly until adjustment is reached.

- Replace the plug buttons.

- If the screen image is out of adjustment laterally, as well as vertically, (that is, if a narrow horizontal strip across the entire screen cannot be brought to sharp focus all at once) then the first step is to restore the lateral adjustment.

- Focus the upper portion of the screen so that the upper right-hand corner is sharp.

- Turn the upper right nut clockwise and observe the upper left corner of the screen.

- If the sharpness improves, continue turning the right-hand nut, continually checking by refocusing the lens, until the entire strip is sharp. If the nut reaches the end of its travel before the entire strip is sharp, begin turning the left-hand nut counter-clockwise until the strip is sharp.

- If the sharpness is not improved (but actually gets worse), stop turning the right-hand nut and begin turning the left-hand nut clockwise until the strip is sharp all across. If the end of its travel is reached before the entire strip is sharp, begin turning the right-hand nut counter-clockwise until the entire strip is sharp.

- The mirror is now in correct lateral adjustment. Proceed to make the vertical adjustment as described in paragraph B-1-b.

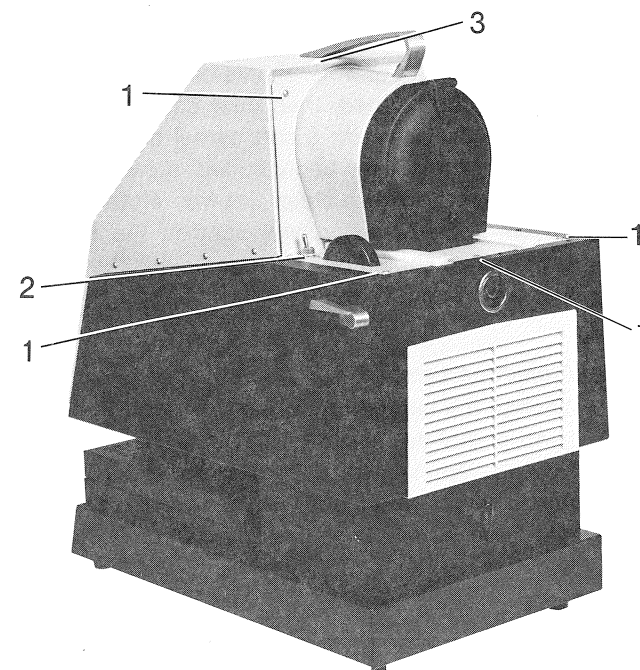


Figure 6 — Lens Deck

- Screws — Deck
- Switch
- Screw — Handle

INSTALLATION OF ACCESSORIES

HEAT FILTER

The heat filter should be used when projecting heat sensitive materials.

Fig. 3 shows the attachment in place with the filter glass lowered to its horizontal position. It is mounted in the projector by means of two posts (1, Fig. 3) on either side of the lamp socket. To insert the attachment move the spring latch to the right and swing the glass so that the hinge is open approximately 90°. Slip the key holes over the mounting posts and pull the unit back toward the rear door to engage the small part of the keyhole

slot. Swing the glass upwards until the spring latch is engaged. The rear surface of the glass should be approximately $\frac{1}{4}$ to $\frac{3}{8}$ in front of the lamp. An adjusting screw, on the spring latch (5, Fig. 2), is provided to adjust this distance.

Once the filter is in place it is not necessary to remove it in order to change the projection lamp. Merely move the retaining spring to one side and let the glass down. Swing down towards you. The lamp can then be changed.

Caution: The filter glass gets very hot in use. Do not handle it immediately after use.

Figure 2 — Heat Filter Attachment

- Filter glass
- Filter holder
- Mounting plate
- Spring clip
- Adjusting screw

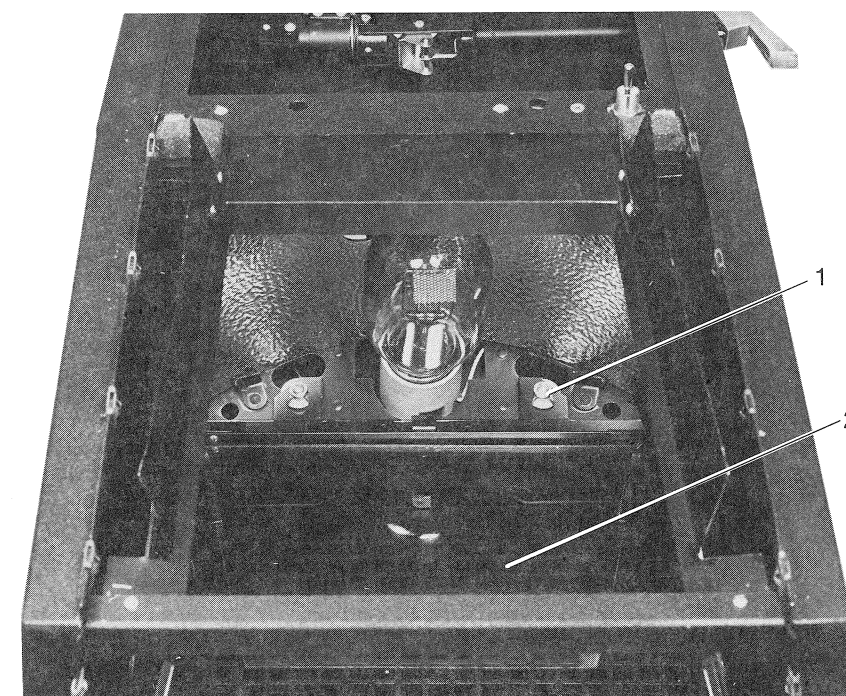
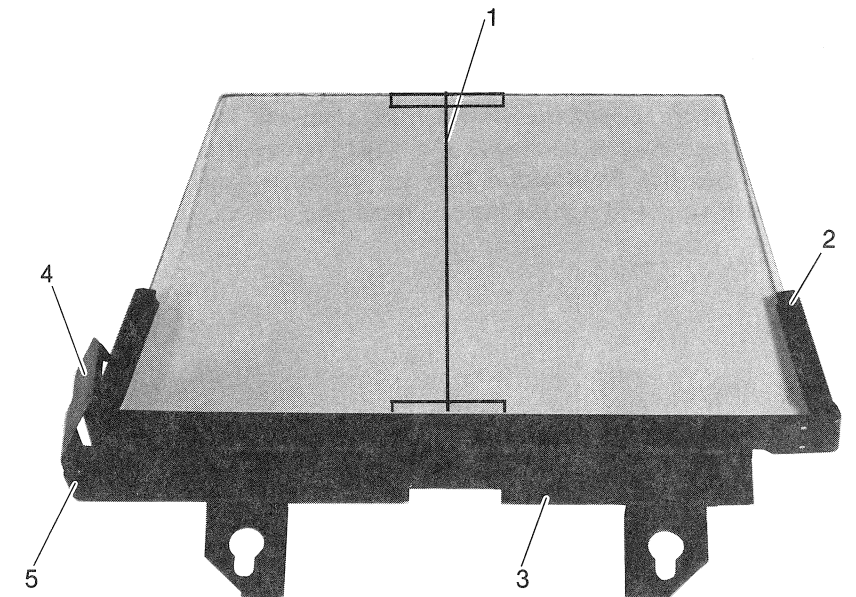


Figure 3
Interior of Vu-Lyte IV with Heat Filter
1. Mounting Post 2. Heat Filter

FEEDOMATIC

The Feedomatic consists of a conveyor belt on which copy is held by a difference in air pressure created by the blower system. The belt conveys copy into and out of the projector by operation of a crank. This offers many advantages: the platen need not be lowered; the room is not flooded with light when new copy is introduced; the presentation can be continuous, new copy being introduced as old copy is removed; continuous copy in roll form can be used; panoramic effects can be obtained and any size up to 10" x 10" copy can be handled without framing or mounting, etc.

The smooth motion of the copy across the screen into projection position, creates a very pleasing effect and helps make the presentation dynamic.

The Feedomatic is secured by the same latches and mounting screws as the Vacumatic platen.

To insert the Feedomatic, (5, Fig. 4) simply lower undercarriage, moving actuating lever (1, Fig. 4) to the left as far as it will go. Loosen the two mounting screws (2, Fig. 4), disengage the two latches (3, Fig. 4) and remove the platen. Slip the Feedomatic into its place, engage latches in slots and tighten the two mounting screws.

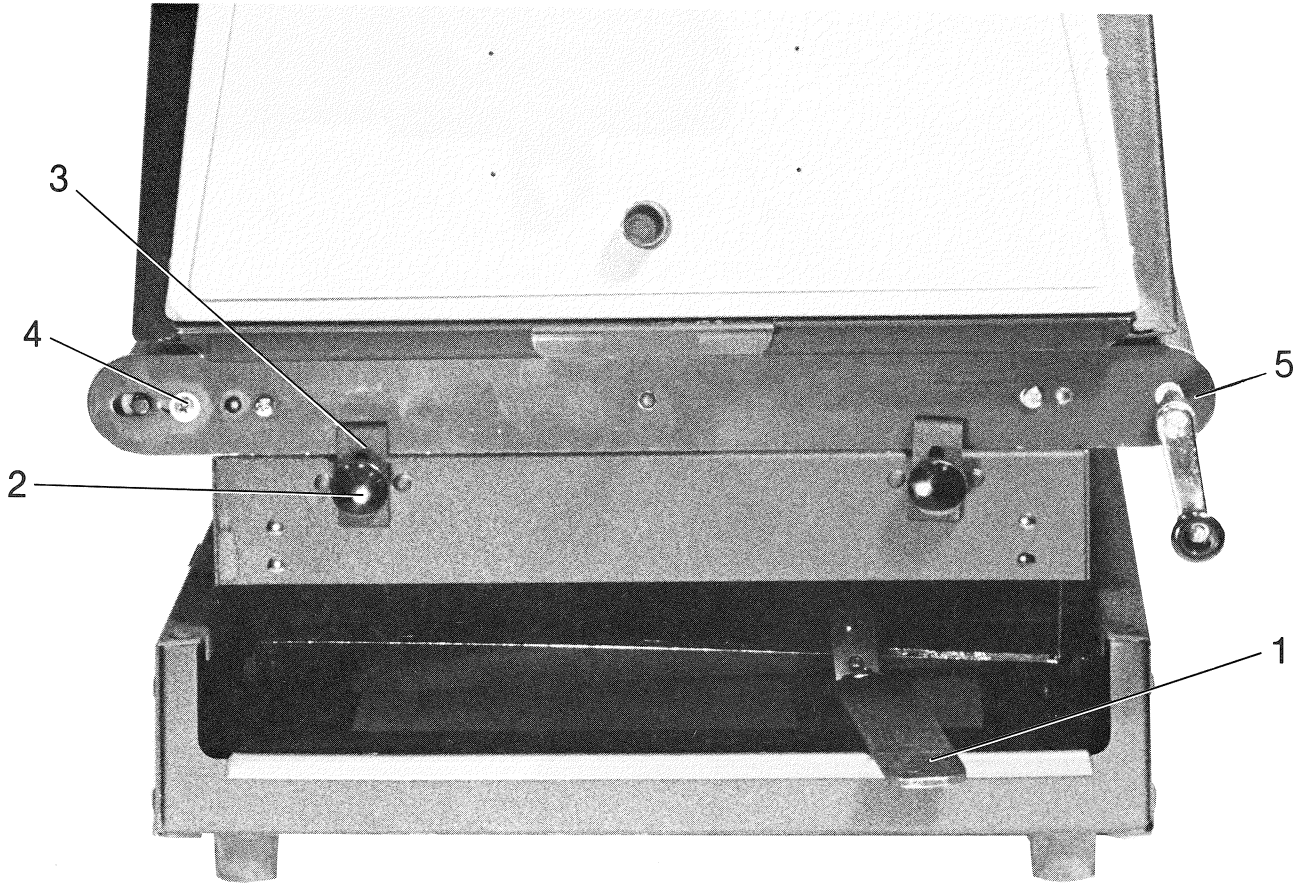


Figure 4

1. Undercarriage actuating lever
2. Mounting screw
3. Latch
4. Screw
5. Feedomatic

PRESSURE PLATE

Photographic material, which tends to curl, and books and magazines which do not lay flat are best projected by using the pressure plate.

To insert the pressure plate, proceed as follows:

Lower the undercarriage. Open the rear door. Pull the drawer out as far as it will go and then push it back in approximately 1". In this position the front (toward the screen) edge of the drawer will be visible. Note that the opening of the drawer is approximately 10" wide and that the left and right edges of this opening are raised slightly. The width of the pressure glass is slightly less than the opening so that the glass fits between these raised edges, being supported only on the front and rear edges. Note also that one edge of the pressure plate is beveled. Place the pressure plate with the beveled edge toward the screen, beveled side up against the two front (toward the screen) ears on the front edge of the drawer. The side edges of the pressure plate fit between the raised edges of the opening. Push the drawer in as far as it will go.

MAINTENANCE AND ADJUSTMENTS

Simple care and occasional cleaning will keep the Vu-Lyte IV in good working order.

A. MAINTENANCE

The following optical elements should be cleaned by wiping with a lint-free rag, damp chamois or lens tissue:

1. *The Projection Lens:*
The projection lens is sealed at the factory and it is only necessary to clean the external surfaces. The rear surface of the lens is easily reached through the rear door of the projector.

2. *Parabolic Reflector:*
This is accessible through the rear door. Remove the projection lamp so that the entire surface can be cleaned.

3. *Secondary Mirrors:*
These can easily be reached through the rear door of the projector.

4. *Front Surface Mirrors:*
The front surface mirror in the opaque projector is one of the most important optical elements.
In contrast with ordinary mirrors, which have the reflecting coating on the rear of the glass, the front surface mirror is coated on the front of the glass and is not protected. This coating is extremely delicate, and care should be taken not to get fingerprints or other marks on it. If the mirror has not been soiled, then dust can be removed from its surface with a soft camel hair brush. If the mirror has been badly soiled, then it may be wiped gently with a clean lint-free cloth or lens tissue. This, however, will scratch the surface slightly and should not be done unless the mirror has been badly soiled.

5. *Projection Lamp:*
Change the lamp through the rear door. Push the lamp gently down and turn counterclockwise ¼ turn to remove lamp. Turn lamp clockwise to install lamp. Note: Align lamp socket ears with matching slots in lamp socket when installing lamp.

6. *Motor:*
The motor in the Vu-Lyte IV is equipped with oil impregnated bronze bearings which do not need lubrication frequently. However, approximately once every six months these bearings should be lubricated with light machine oil. The bearings are readily accessible by removing the front grill of the projector.

7. *Undercarriage:*
It is also recommended that the helical cam which raises and lowers the undercarriage and the rollers which work against the cam be lubricated every three months.

B. ADJUSTMENTS

Your Vu-Lyte IV projector has been assembled and adjusted by experts at the factory. Do not attempt to make any adjustment unless it is absolutely necessary. No adjustment should be required unless the projector has been subjected to physical damage.

1. *Front Surface Mirror:*
Correct adjustment of the front surface mirror is necessary for the proper performance of any opaque projector and this is also true of the Vu-Lyte IV. The front surface mirror forms a part of the optical system, and if it is not properly adjusted, it will be impossible to obtain good resolution all over the field and the screen image will not be square but will exhibit what is called keystone effect. When the mirror is in proper adjustment, a horizontal line on the surface of the mirror would be parallel with the front of the projector. Also, the line of intersection of the mirror with a vertical plane through the projector, would form equal angles with the axis of the lens and the perpendicular to the copy plane.

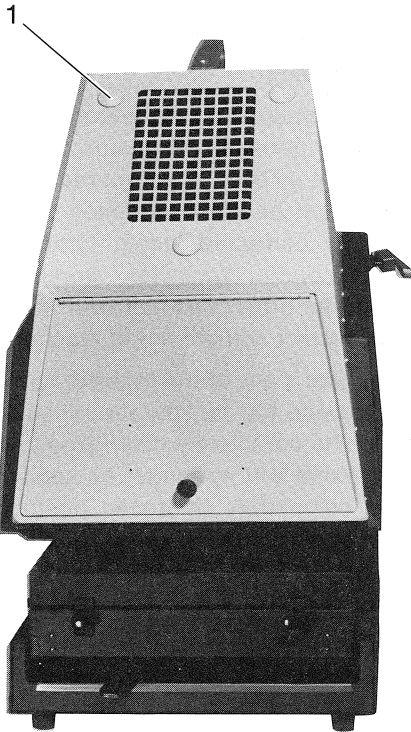


Figure 5 — Rear View

1. Plug button