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BESELER

67CS

enlarger/instruction manual

The "Safeguards" statement reproduced below is in accordance with Underwriters Laboratories "Standard for Safety, UL 122, Photographic Equipment."

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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"Standard for Safety, UL 122, Photographic Equipment"

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67CS & 67CS-XL SPECIFICATIONS

	STANDARD	XL
Height - Fully Extended	43-1/2"	52-1/2"
Baseboard Dimensions	23-3/4" x 18" x 3/4"	25-1/2" x 17-7/8" x 1-1/4"
Lamp Type - Condenser Lamphouse	PH140, 75W, 120V (Cat. 8101) PH1400, 75W, 230V (Cat. 8114)	
Negative Sizes	2-1/4 x 2-3/4 (6 x 7 cm) or smaller	

Beseler periodically updates products and therefore illustrations and descriptions appearing in this manual may differ slightly from the equipment.

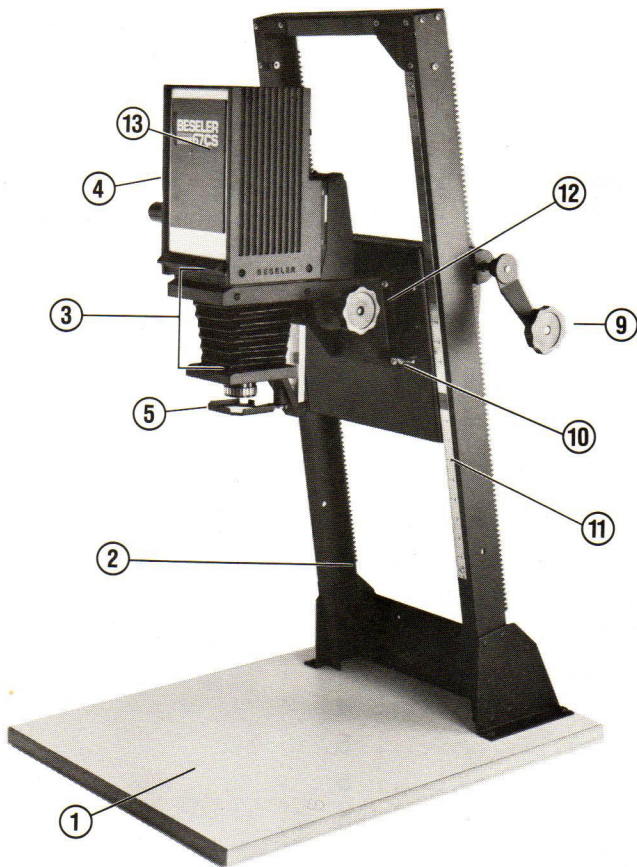


FIGURE 1

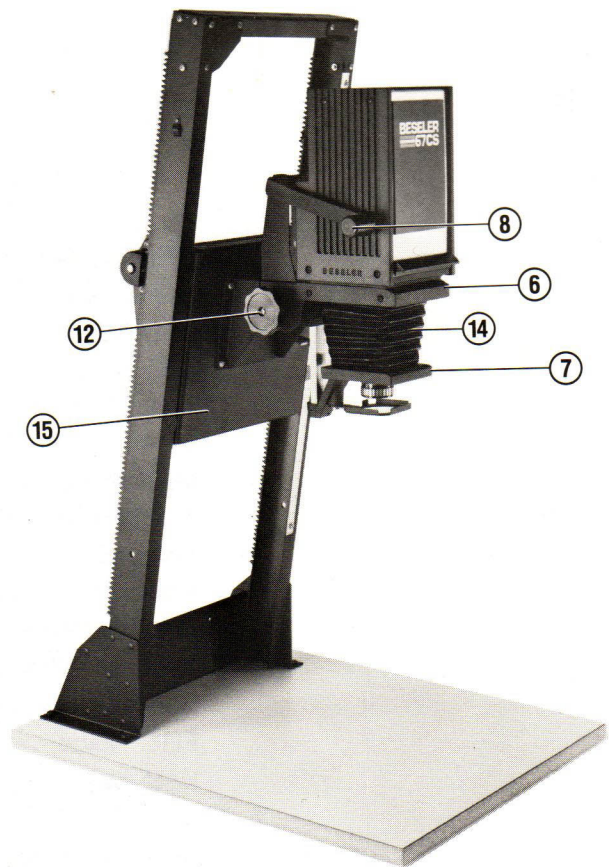


FIGURE 2

- | | | | |
|-------------------------|------------------------------|--------------------|---------------------|
| 1. Baseboard | 6. Negative Stage | 7. Lens Stage | 11. Elevation Scale |
| 2. Frame Assembly | 7. Lens Stage | 12. Focus Knob | 12. Focus Knob |
| 3. Projector Assembly | 8. Lamphouse Elevating Arm | 13. Lamphouse Door | 13. Lamphouse Door |
| 4. Condenser Lamphouse | 9. Carriage Elevating Handle | 14. Bellows | 14. Bellows |
| 5. Safety Filter Holder | 10. Carriage Elevating Lock | 15. Cross Carriage | 15. Cross Carriage |

I. 67CS ASSEMBLY INSTRUCTIONS (Standard)

Tools Required for Assembly:

- Phillips Head Screwdriver
- Slotted Head Screwdriver
- Hammer

Contents of Shipping Carton

1. Baseboard
2. Frame Assembly
3. Projector Assembly
4. Condenser lamphouse or Dichro 67S Lamphouse
5. Hardware Kit
 - a. 6 #1/4-20 x 3/4 Hex Head Screws
 - b. 4 #10-32 x 3/8 Phillips Head Screws
 - c. 1 #8-32 x 3/4 Pan Phillips
 - d. Carriage Elevating Crank
 - e. Red Safety Filter
 - f. Filter Holder
 - g. 1 Shoulder Screw
 - h. 1 Bow Washer
 - i. 1 #8-32 Hex Nut
 - j. 1 Internal Tooth Lockwasher

- k. 2 Wing Nuts
- l. 6 Tee Nuts (Standard Version Only)
- m. 4 Baseboard Pads (Standard Version Only)

- A. Place the baseboard with the smooth-textured side down on a suitable surface.
- B. Insert the six Tee Nuts into the recessed holes in the baseboard and tap with a hammer. The nuts do not have to be flush with the bottom of the board as they will be drawn up when you tighten the screws from the other side.
- C. Apply the four self-adhesive pads to the baseboard approximately 1/2" from each corner.
- D. Turn the baseboard over.
- E. Place Enlarger Frame on top of Baseboard and align holes in Enlarger Frame with holes in Baseboard.
- F. Secure the Enlarger Frame to the Baseboard using the 6 hex head screws. Insert all 6 screws loosely at first and then tighten each one.
- G. Attach Carriage Elevating Crank to the Enlarger Carriage using the 8-32 x 3/4" screw (**note:** wedge-shaped slot in crank must be aligned with wedge-shaped end of shaft).

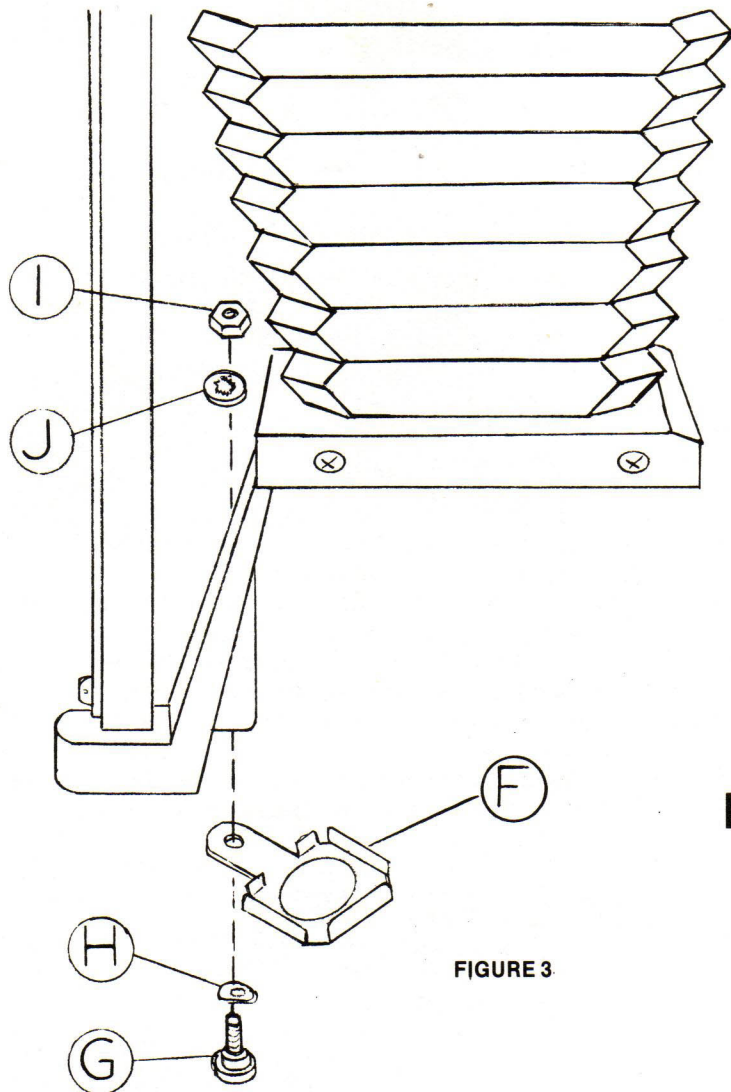


FIGURE 3

- H. Attach Filter Holder to bottom of Lens Stage using Fig. 3 as a guide for assembly.
- I. Align the 4 holes on the rear flange of the Projector Assembly with the 4 mounting holes on the Cross Carriage on the Enlarger Frame.
- J. Secure the Projector Assembly to the Cross Carriage using the 4 #10-32 x 3/8 screws.
- K. Raise the Lamphouse Elevating Arm and mount the Lamphouse on the Projector Assembly using the 2 wing nuts as illustrated in Fig. 4.
- L. Remove the Lamphouse door by sliding it up and out of its track. Insert the condensers and filter holder as indicated on the rear of the door.

II. 67CS-XL Assembly Instructions

The assembly instructions for the 67CS-XL are the same as for the 67CS Standard except that the Baseboard and the Lamphouse are each packaged in separate cartons. Also, the XL Frame requires 8 mounting screws to mount it to the baseboard.

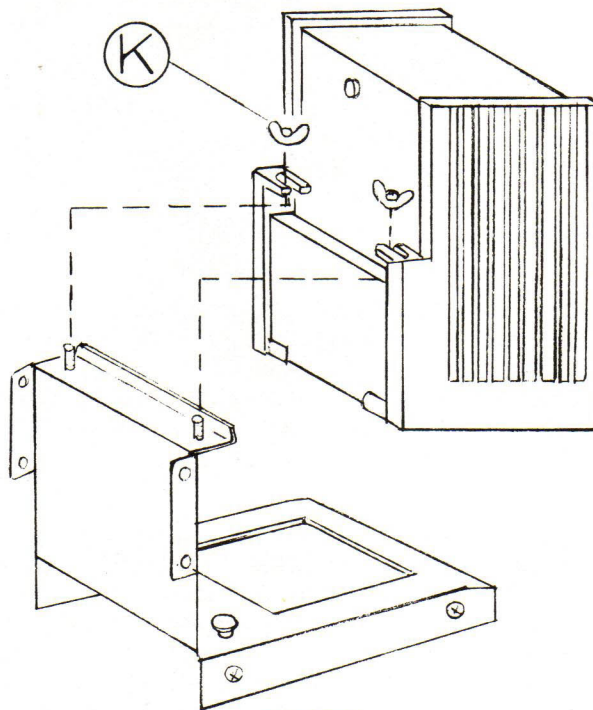


FIGURE 4

III. OPERATING INSTRUCTIONS

Inserting Lens (Fig. 5)

You will need to obtain a lens of the appropriate focal length for the negative format from which you will be printing, and a lensboard to mount the lens on the enlarger. The table below indicates which lenses are required for various formats and the range of magnification which can be obtained with each. Lensboards are available for most standard lens mounts.

Note that the bottom of the lens stage contains two retaining strips, at the front and the rear, which hold the lensboard in place. With the back edge of the lensboard tilted upward, insert it into the groove above the rear retaining strip (see Fig. 5). Push the lensboard back into the groove and raise the front edge until the board is level. A leaf spring in the rear groove will push the lensboard into the groove above the front retaining strip and hold it in position. Be sure the lensboard is securely held at the front and the rear of the lens stage. To remove the lensboard, reverse the procedure.

Format	Lens	Min.	Approximate Magnification Range	
			Max. (Std. Chassis)	Max. (XL Chassis)
2-1/4"x2-3/4"	90mm	2X	7X	9.5X
2-1/4"x2-1/4"	75mm	1.5X	8.5X	11.5X
35mm	50mm	1.5X*	13.5X	18X
Subminiature (110)	35mm	4X*	22X	28X

*Smaller magnifications possible by elevating easel from baseboard.

Inserting the Negative (Fig. 6)

The negative is placed in the negative carrier, with the emulsion side down, by sliding it under the pins on the lower plate. A spring in the carrier hinge will keep the upper plate slightly raised to facilitate inserting a negative and/or moving a strip of negatives through the carrier.

To position the negative carrier in the enlarger, raise the lamphouse elevating arm. It will automatically lock in an open position.

Place the negative carrier on the negative stage and push in until the carrier slots engage the locating pins at the rear of the stage. Gently lower the lamphouse elevating arm, so that the lamphouse comes to rest on top of the negative carrier.

Accessory Filter Holder

The accessory filter holder, attached below the lens stage, accommodates the standard red safety filter, optional variable contrast and special effect (e.g. soft focus) filters and light integrators. The red safety filter may be used when checking composition and position of the projected image while there is enlarging paper in the easel. (This filter should not be used when working with color or panchromatic black and white papers, as these materials are sensitive to red light.) The accessory holder must be positioned directly under the lens or fully swung to the left, to avoid partially blocking the projected image.

When printing with variable contrast filters in the holder, it is important to focus with the filter in the optical path to avoid a shift in focus, which can occur when the filter is introduced.

Elevation and Focus

After the negative has been positioned in the enlarger, the focus may be adjusted by turning the focusing knob.

A special lock (Fig. 1, Item 10) is provided for securing the enlarger carriage. The lock is

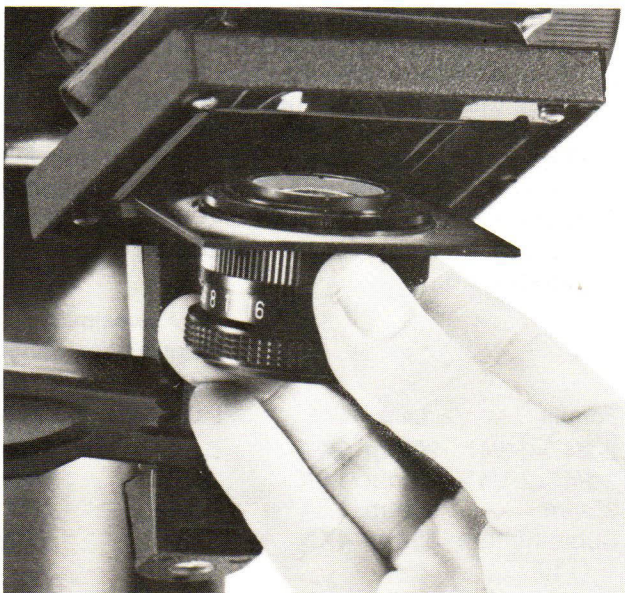


FIGURE 5

operated by rotating the knob clockwise. Turning it completely counterclockwise releases its braking mechanism. Always release this knob before changing the carriage position. If only partially released, the gears on the carriage will wear prematurely.

To change magnification, release the carriage lock and turn the elevating crank to raise or lower the enlarger carriage to the desired height.

An elevation scale is provided on the right side of the enlarger frame to enable you to record the height and to repeat that magnification at a later date.

Oversize Prints

When an extreme degree of enlargement is desired (greater than can be achieved on the baseboard) the enlarger can be mounted to the baseboard in a reversed position to enable you to project images onto an easel placed on the floor. Remember to counter-balance the weight of the enlarger with several heavy objects on the baseboard or securely clamp the baseboard to a table before reversing. Then simply remove the screws holding the enlarger to the base, turn the enlarger 180° and reassemble. (**Note:** When enlarger is rotated you will only be securing the frame using the four outermost screws.)

IV. CONDENSER LAMPHOUSE

The Condenser System

The condenser system in the condenser lamphouse consists of two 4" condensers. Condensers may be removed for cleaning or lamp changing by lifting the front edge slightly and pulling straight out. To replace the condensers, insert the back edge into the slot and push toward the back of the enlarger, until the front edge of the condenser drops behind the small lip at the front of the slot. The condensers are identical, so there is no danger of reversing them. Be certain, however, that the convex (rounded) surfaces are always facing each other.

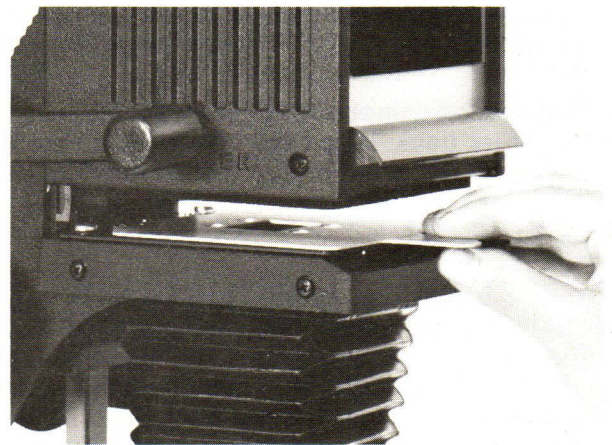


FIGURE 6

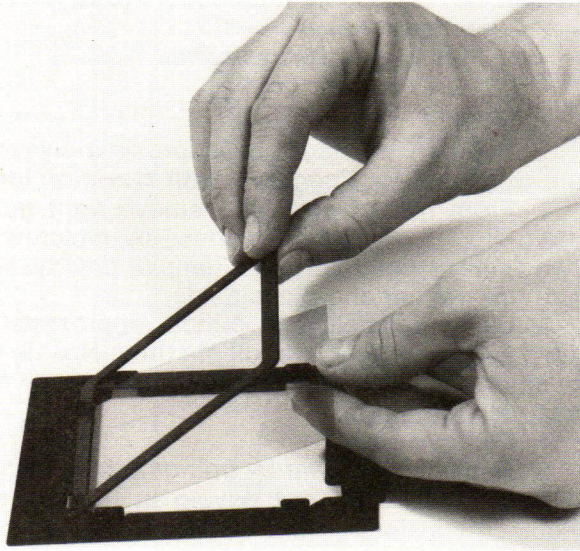


FIGURE 7

Filter Holder (Fig. 7)

A two-piece filter holder is located between the condensers. To remove the holder, lift the front edge slightly and pull straight out. Color printing (CP), variable contrast or neutral density filters, 3-1/2" square, are placed between the pieces of the holder. The holder is reinserted by placing it in its slot and sliding it back until the front edge drops behind the lip at the front of the slot.

Heat Absorbing Glass

A slot is provided in the condenser lamphouse for inserting the optional heat absorbing glass (see your dealer for details). The glass aids in protecting the negative from the heat of the enlarging lamp, minimizing any negative buckling, and also protects the dyes in color negatives and transparencies.

V. ADJUSTMENTS

Your enlarger has been fully adjusted and aligned at the factory and should require no further adjustments. If it does become necessary to make adjustments to the enlarger in the future, refer to the appropriate section below.

Alignment of Negative stage, Lens Stage (Fig. 8)

In order to ensure flatness of field, it is important that the negative stage and lens stage be parallel to the baseboard. To make this adjustment, loosen (do not remove) the two Phillips head screws on each side of the negative stage. The entire negative stage/lens stage assembly may then be tilted from side to side and front to back until the required conditions are met. Check your adjustment(s) with a carpenter's square or triangle to make sure both sides and front and back of the negative stage are equally distant from the baseboard. Tighten the screws to secure the assembly in this position.

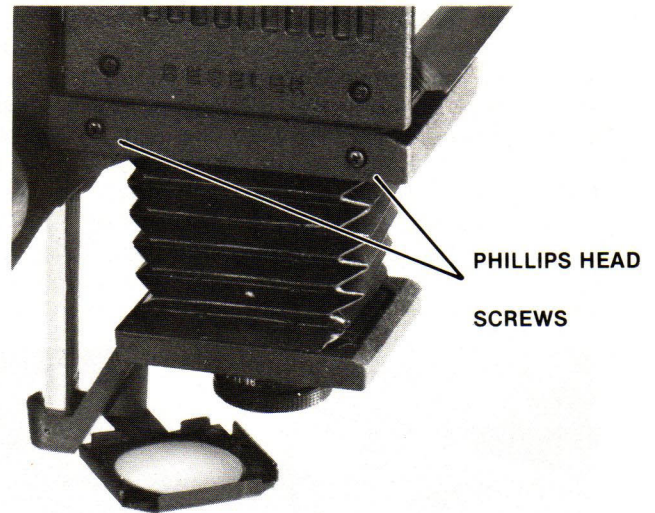


FIGURE 8

Focusing Mechanism

If the focusing mechanism is too stiff, it will be difficult to critically focus. If it is too loose, slippage may occur. To adjust the focusing mechanism, loosen or tighten the hex head screws at the bottom of each focusing spring (see Fig. 9), as needed. Try not to have one spring much tighter or looser than the other.

Aligning Carriage in Frame

If the carriage should ever need to be realigned (that is, if either gear on the carriage should jump a tooth on the track), correct it as follows:

- a. Remove the two screws holding the right-hand gear guard.

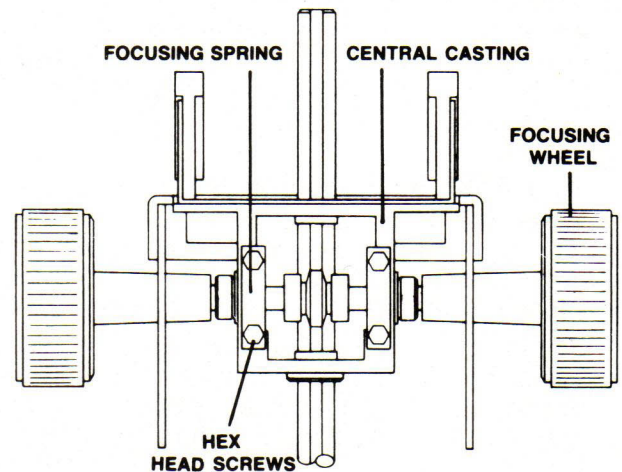


FIGURE 9

- b. Pull the guard away from the frame and push the right side of the carriage toward the back of the enlarger. This will disengage the right gear from the track and it may be engaged in the correct position.
- c. Replace the guard and the two screws.

Adjustment of Counterbalance Spring (Standard Chassis Only)

If the stored counterbalance spring tension

should be lost (by letting the crank loose, etc.), it can be restored by turning the counterbalance assembly three to four times clockwise from left side facing machine, letting spring hook reengage under washer. (Fig. 10) Test by raising carriage to top. If it drops add another turn of tension. If carriage tends to move upward, reduce spring tension by unhooking spring enough to bypass washer for one turn. When adjustment is satisfactory, check that spring is well engaged under washer.

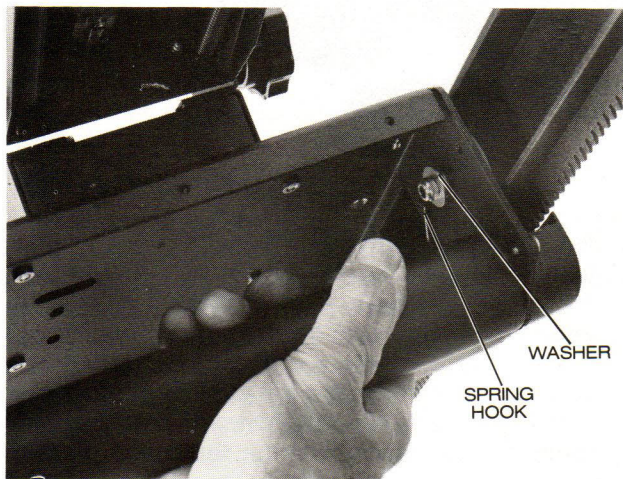


FIGURE 10

VI. MAINTENANCE

The Beseler 67CS is designed to give years of trouble-free service; maintenance is minimal. The 67CS should be kept free of dust to ensure high quality, clean prints. A heavy Pliofilm, transparent dust cover (Catalog number 8047) is available from your Beseler dealer. Should any dust settle on the 67CS wipe off with an anti-static cloth, such as the Color by Beseler Anti-Static Cloth (Catalog number 8956).

A. LAMP REPLACEMENT

When the lamp in your 67CS condenser head burns out, replace with a PH140 lamp, 75W, 120V (Beseler Cat. #8101) or, for 220 volt versions, a PH1400, 75W lamp (Beseler Cat. #8114).

To replace the lamp, first unplug the power cord and allow the lamp to cool down. Slide the lamp-house door off and remove the upper condenser and the filter holder to assure easy access. Unscrew the old lamp and screw in the new lamp. Replace filter holder, upper condenser and lamp-house door.

B. GEAR REPLACEMENT

The gears in the 67CS elevating mechanism should not need replacement under normal operating conditions. Extreme gear wear is due to failure to release the Elevation Lock prior to lowering or raising the lamphouse. If the gears should become excessively worn, requiring replacement, order a 67CS gear replacement kit (part No. 10-43751) from your authorized Beseler

dealer. The replacement procedure is as follows:

Tools required:

#2 Phillips head screwdriver

1/8" drift punch
hammer

1. Position carriage to approximately mid-elevation and lock securely with elevation lock.

2. From rear of enlarger, remove right guard (Item No. 15 on Exploded View) by unscrewing two Phillips head screws. Remove bow washer and flat washer and place aside.

3. Using a small drift punch (approximately 1/8") and hammer, drive roll pin (Item No. 19) out of shaft. If pin is intact, set aside for reuse; if not, use new pin in kit.

4. Remove gear.

5. Replace new gear by lining up hole in gear with hold in shaft and driving in the roll pin. Replace washers — flat washer first, then bow washer with rounded side against flat washer.

6. Replace gear guard and both screws.

7. The procedure for replacing the left gear is the same, except that the elevation crank must be removed prior to removing the guard. Simply unscrew the Phillips head screw holding the crank in place and pull from shaft. After the left gear and guard are replaced, place crank on shaft and tighten Phillips head screw.

8. Check alignment and correct, if needed, by following the alignment procedure described in the previous section.

C. ELEVATION LOCK REPLACEMENT

The elevation lock on your Beseler 67CS enlarger is designed for lasting, reliable service. Excessive wear to the lock assembly components is caused by failure to fully release the lock before raising or lowering the carriage. If any of the elevation lock components should wear out, order a 67CS Lock Replacement Kit (Part No. 10-43750) from your Beseler dealer and follow the instructions below. NOTE: The 67CS-XL requires the removal of six slotted head tap screws (three at the top of the cross carriage and three at the bottom) to remove the cross carriage rear cover to gain access to the elevation lock components.

1. Lower carriage to baseboard.

2. Grasp clamp screw (Exploded View Item No. 12) in the left hand, and, from the rear of the enlarger, remove the Phillips head screw (use #1 Phillips head screwdriver) from the clamping screw.

3. Turn clamp screw counter clockwise to remove threaded end from tapped rear clamping bar (Item No. 13).

4. Remove rear clamping bar from slot in cross carriage. Pull clamp screw from cross carriage and remove other clamping bar.

5. Reverse the procedure to install new clamping bars and clamp screw.

D. CONDENSER CLEANING

Be sure the condensers are free of dirt and dust. If necessary, they may be cleaned with a soft cloth or lens cleaning tissue.

E. LUBRICATION

Most moving surfaces in your enlarger are made of self-lubricating materials. However, it is advisable to lubricate moving parts with a small amount of Lubriplate or a medium weight oil every six months.

VII. LIMITED ONE YEAR WARRANTY

Beseler Photo Marketing Company, Inc., Florham Park, New Jersey warrants its products (with the exception of lamps), to the original purchaser only, to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase.

This Warranty does not apply to our products which show evidence of accidental damage, misuse or abuse by you. The Warranty also does not apply to our products which are defective or damaged by tampering or attempted repair by an unauthorized Beseler agent.

Beseler exclusively limits this Warranty to repair or replace (at Beseler's option) the defective part of its product. If you decide to send our product to our authorized repair outlet, you must insure the product and prepay all transportation expenses. Beseler will not be liable for damages caused in the course of shipping the product to you. You must allow at least six (6) weeks for correction of the defect.

ANY IMPLIED WARRANTIES OF FITNESS FOR USE, OR MERCHANTABILITY, THAT MAY BE CREATED BY OPERATION OF LAW ARE LIMITED TO THE ONE (1) YEAR WARRANTY PERIOD.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

NO LIABILITY IS ASSUMED FOR EXPENSES OR DAMAGES RESULTING FROM INTERRUPTION IN OPERATION OF EQUIPMENT, DAMAGE TO FILM OR PAPER, OR FOR INCIDENTAL, DIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

In the event there is any defect in materials and workmanship of our product you may contact our Customer Service Department at Beseler Photo Marketing Company, Inc., 8 Fernwood Road, Florham Park, New Jersey 07932. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You may also have implied warranty rights. In the event of a problem with warranty service or performance, you may be able to go to a Small Claims Court, a State Court, or a Federal District Court.

IMPORTANT:

THIS WARRANTY SHALL NOT BE VALID AND BESELER SHALL NOT BE BOUND BY THIS WARRANTY IF OUR PRODUCT IS NOT OPERATED IN ACCORDANCE WITH BESELER'S WRITTEN INSTRUCTIONS.

You must prove the date of purchase by producing a sales receipt indicating that you are the original purchaser.

**IMPORTANT! KEEP THIS INFORMATION HANDY FOR FUTURE REFERENCE
KEEP YOUR SALES RECEIPT!**

VIII. SERVICE INFORMATION:

Should you need service for your BESELER photographic equipment after the warranty has expired, please follow these steps:

PACK the product in the original packaging material to protect it in transit.

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 thrown out with the packing material.

ADDRESS the package to BESELER SERVICE MANAGER, 8 Fernwood Road, Florham Park, NJ 07932.

PREPAY FREIGHT CHARGE AND INSURE the package against damage or loss in transit.

ESTIMATES. We will gladly provide estimates upon request. There is a flat estimate charge of \$7.50 payable in advance. The estimate charge will be credited towards the cost of the repair. No work will be undertaken or billed until written approval of the estimate is received.

CHARGES. Your local Beseler dealer has a list of current price ranges to service Beseler photographic equipment. Any repair likely to exceed the maximum recommended service price will be estimated and held for your approval before work is begun.

PAYMENT. Your check for \$7.50 must accompany your request for an estimate; alternatively, you may charge your VISA or MASTER CHARGE account. Repairs must be paid in full prior to return to owner. Personal checks or VISA/MASTER CHARGE accepted. (If you pay by VISA or MASTER CHARGE, Please give the account number and expiration date.)

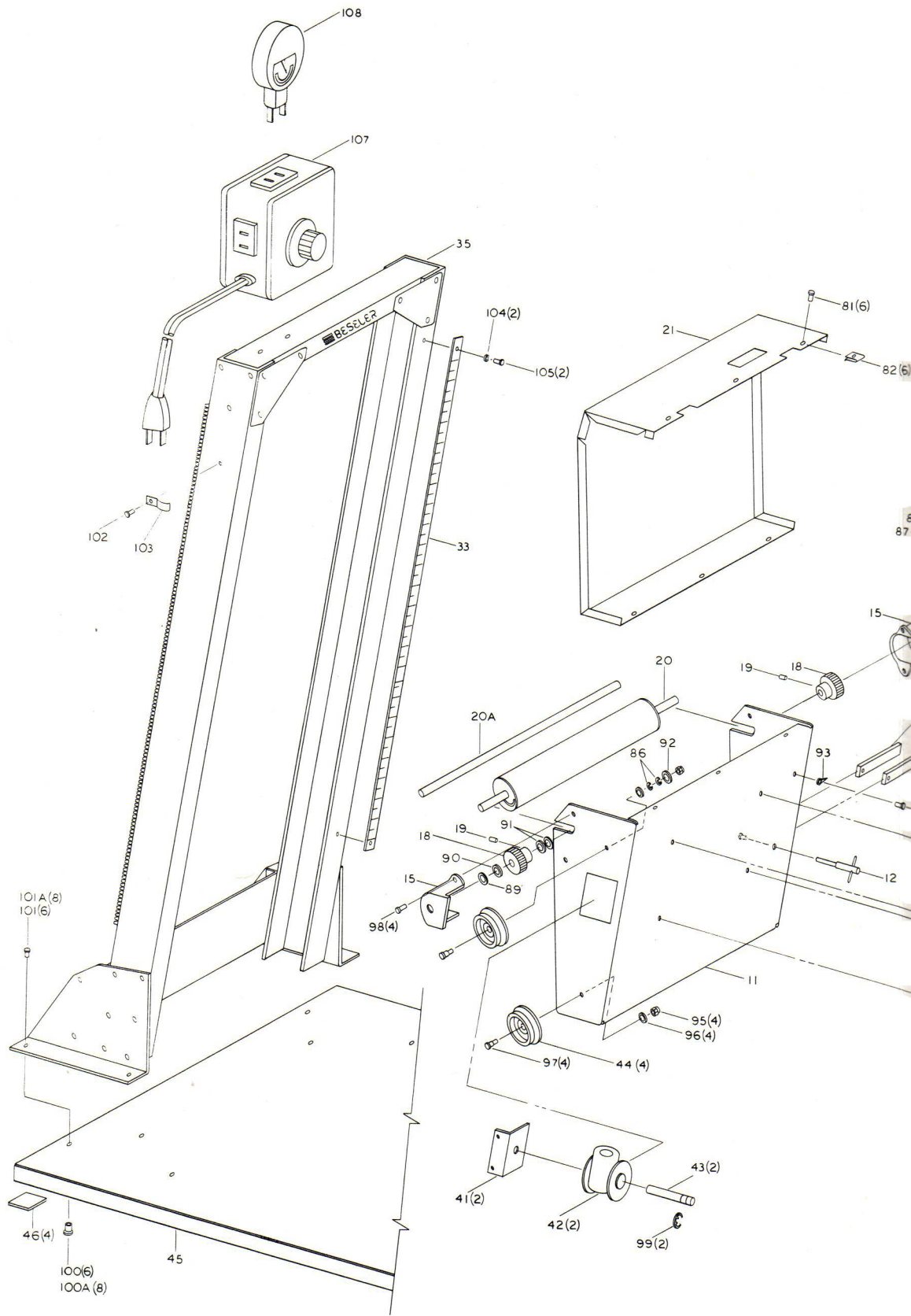
OBsolete EQUIPMENT. Beseler reserves the right to refuse to repair equipment that has been discontinued for five (5) years.

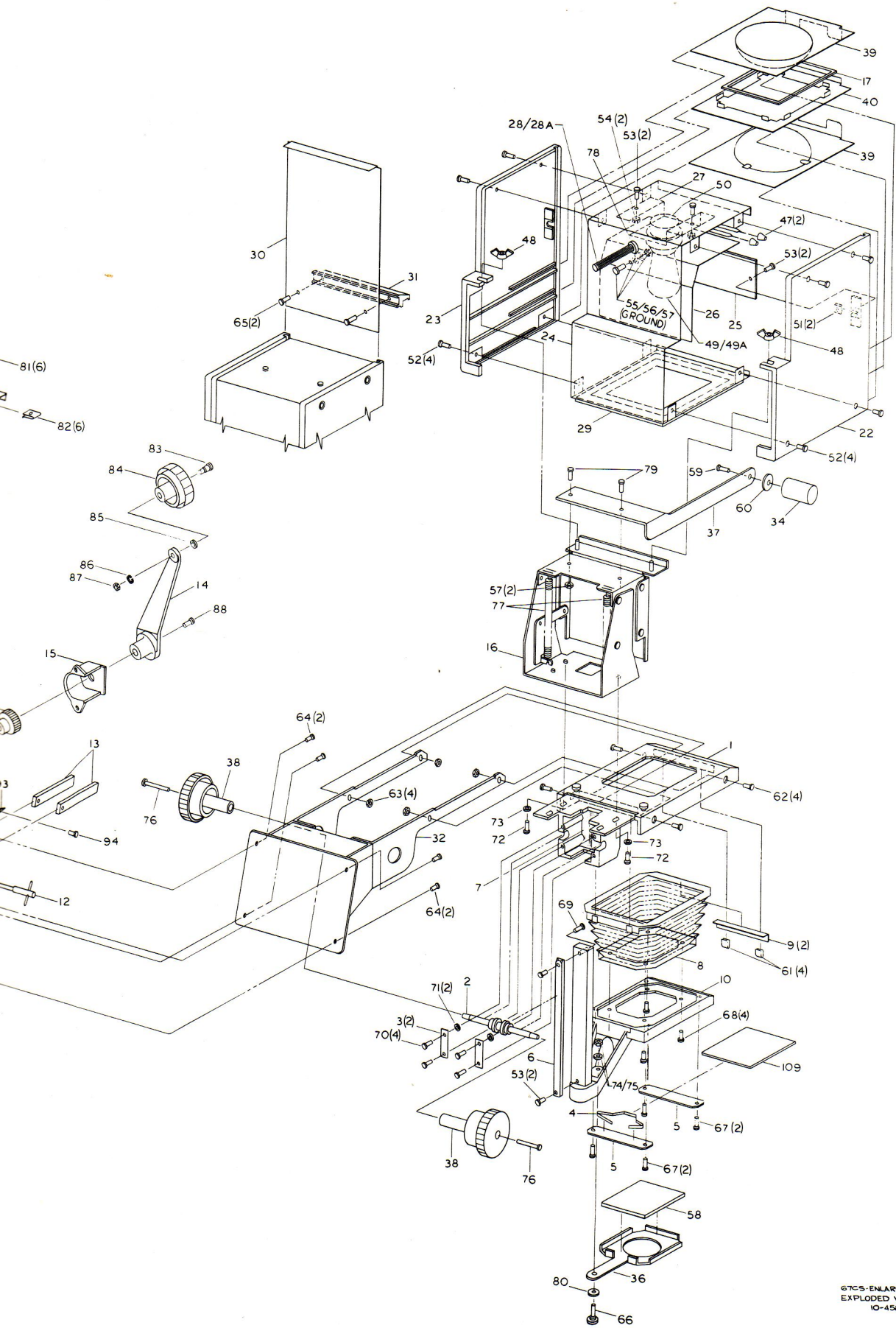
IN-WARRANTY SERVICE. There is no charge for service performed during the warranty period. PROOF OF PURCHASE is required for warranty service and must be enclosed with the return. Terms of the warranty are explained above.

67CS REPLACEMENT PARTS LIST

REF. NO.	DESCRIPTION	PART NO.	REF. NO.	DESCRIPTION	PART NO.
1	Negative Stage	10-42019	54	Nut - Lock Hex #6-32	546-55-04
2	Focusing Shaft	10-42024	55	Screw - Mach. #10-32 x 3/8 Pan Phillips	524-12-02-01
3	Focusing Shaft Spring	10-42027	56	Lockwasher #10	549-47-08
4	Lens Board Spring	10-42032	57	Locknut - Hex #10-32	546-55-08
5	Lens Board Retainer	10-42033	58	Red Safety Filter	Cat. #8040
6	Spline	10-42037	59	Screw - Tap #8B x 11/16 Pan Phillips	538-21-22-02
7	Bearing Pad	10-42041	60	Plain Washer #10B	548-24-40
8	Bellows	10-42045	61	Clip - "U" Type	555-42-23
9	Bellows Retaining Angle	10-42052	62	Screw - Sems #6-32 x 3/8 Pan Phillips	540-60-73
10	Lens Stage/Focusing Bar	10-42128	63	Nut - Hex #6-32	545-19-20-01
11	Cross Carriage	10-07626	64	Screw - Sems #10-32 x 3/8 Pan Phillips	540-60-49
12	Clamp Screw		65	Screw - Tap #4B x 3/8 Pan Phillips	538-13-12-30
13	Clamping Bars	Replacement Kit 10-43750	66	Shoulder Screw	540-30-52
14	Elevating Crank	10-44050	67	Screw - Tap #4B x 3/16 Pan Phillips	538-13-06-16
15	Guard - Pinion	10-07680	68	Screw - Tap #4B x 1/4 Pan Phillips	538-13-08-32
16	Elevator	10-45964	69	Screw - Mach. #6-32 x 1/8 Pan Phillips	519-04-02-01
17	Bottom Filter Holder	10-42103	70	Screw - Mach. #6-32 x 5/16 Hex Head	519-10-40-01
18	Gear		71	Plain Washer #6	548-18-07
19	Roll Pin	Gear Replacement Kit 10-43751	72	Screw - Sems #10-32 x 3/8 Hex Head	540-60-20
+ 20	Counterbalance Assembly	10-07636	73	Plain Washer #10	548-24-04
• 20A	Counterbalance Shaft	10-44051	74	Nut - Hex #8-32	545-21-20-01
• 21	Cross Carriage Rear Cover	10-43725	75	Lock Washer #8	549-45-08
22	Lamphouse Left Side	10-42091-01	76	Screw - Mach. #6-32 x 1 3/4 Pan Phillips	519-56-02-02
23	Lamphouse Right Side	10-42091-02	77	Extension Spring	562-70-64
24	Lamphouse Wraparound	10-42092-04	78	Power Cord Bushing	600-82-30
25	Front Heat Shield	10-42093	79	Screw - Mach. #10-32 x 3/8 Pan Phillips	524-12-02-01
26	Rear Heat Shield	10-42153	80	Bow Washer 17/64 x 9/16 x 1/16 High	549-20-19
27	Lamp Socket Bracket	10-42155	• 81	Screw - Tap #6B x 1/2 Pan Phillips	538-19-16-06
28	Power Cord 120V	10-42164	• 82	Nut - Speed "U" Type .025 - .040	555-05-04
28A	Power Cord 240	10-42169	83	Shoulder Screw #10-32x1 1/4 Hex Head	540-35-04
29	Lamphouse - Cushion	10-42124	84	Knob	568-05-06
30	Lamphouse Door	10-42173-92	85	Bow-Washer 1/4 x 1/2 x 3/32 High	549-20-27
31	Lamphouse Door Handle	10-42110	86	Lockwasher #10	549-47-08
32	Carriage	10-43786	87	Nut - Hex #10-32	545-24-20-01
+ 33	Elevation Scale	10-43727-02	88	Screw - Mach. #8-32x3/4 Truss Phillips	521-24-32-01
• 33A	Elevation Scale	10-43727-01	89	Bow Washer 25/64 x 5/8 x 3/32 High	549-20-27
34	Actuating Arm Knob	10-42078	90	Washer .377 x .792	548-46-16
+ 35	Frame Assembly	10-07631	91	Washer 25/64 x 3/4	548-48-13
• 35A	Frame Assembly	10-43717	92	Washer #10B x 3/4	548-24-29
36	Safe Filter Holder	10-42040	93	Arrow Pointer	660-52-08
37	Elevating Arm	10-45923	94	Screw - Tap #4B x 3/16 Pan Phillips	538-13-06-16
38	Focusing Knob	10-45933	95	Nut - Lock #10 - 32 Hex	546-57-13
39	4" Dia. Condenser	10-42098	96	Washer #10B x 1/2	548-24-09
40	Top Filter Holder	10-42102	97	Shoulder Screw #10-32x53/64 Cyl Head	540-30-28
• 41	Spring Drum Mounting Bracket	10-43723	98	Screw - Tap #8B x 5/8 Pan Phillips	538-21-20-04
• 42	Constant Force Spring Assembly	10-43718	• 99	Retaining Ring "E" Type	555-26-14
• 43	Spring Drum Shaft	10-43722	+ 100	Tee Nut, Propeller #1/4 - 20	546-40-15
44	Roller	10-07606	• 100A		
+ 45	Baseboard	10-07602	+ 101	Screw - Mach. #1/4 - 20 x 3/4 Hex	527-24-41-06
• 45A	Baseboard	Cat. #8010	• 101A		
46	Pad - Baseboard	10-42018	102	Screw - Tap #4B x 3/16 Pan Phillips	538-13-06-16
47	Wire Connector	600-25-22	103	Clamp - Cable	555-45-02
48	Wing Nut #10-32	546-20-13	104	Washer #6 x 3/8	548-18-07
49	Enlarger Lamp 120V	Cat. #8101	105	Screw - Tap #6F x 3/16 pan Slot	538-19-06-05
49A	Enlarger Lamp 240V	Cat. #8114	107	Resistrol	Cat. #8109
50	Lamp Socket	625-82-07	108	Bestrol Voltmeter	Cat. #8111
51	Speed Nut #6-32 "U" Type	555-05-03	109	Lens Board	Cat. #6723
52	Screw - Tap #6B x 5/16 Pan Phillips	538-19-10-12			
53	Screw - Mach. #6-32 x 5/16 Pan Phillips	519-10-02-01			

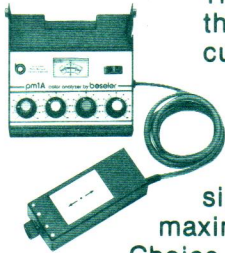
+ Standard Model
• XL Model





G7CS-ENLARGER
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10-45884-XX

8155 pm1A Color Analyzer



The pm1A Color Analyzer combines the latest advances in solid state circuitry and popular pricing in an instrument of professional quality and performance. The pm1A utilizes a photomultiplier light detector and features a compact design with separate probe, allowing maximum utilization of limited space.

Choice of spot or integrated readings on large, back-lighted meter. Solid state electronics provide instantaneous warm up and internal stabilization. Automatic safety overload circuitry protects unit from damage and renders reprogramming unnecessary after exposure to room lights. UL approved.

8152 pm2L Color Analyzer

The pm2L offers most of the sophisticated features available on color analyzers costing many times its price. Its illuminated 4-1/8" calibrated meter is completely linear in response - allows direct readout of filtration and exposure time. Ultra-sensitive photo multiplier probe capable of taking spot or integrated readings. Automatic safety over-

load circuitry prevents damage to unit and eliminates need for reprogramming if probe is accidentally exposed to white (room) light. Calibrated program knobs enable infinite programming capacity. UL approved. 12 month warranty. Includes dust cover and integrator.

8161 pm3L Color Analyzer

Offers a host of highly sophisticated features, including a direct reading, 1/2" high LED digital display with variable brightness control.

Uses a photo multiplier light detector for the highest sensitivity presently available. Dual-concentric, multiturn potentiometers provide coarse and fine program entry. Optional Accessory Program Modules give instant, precise changes of program when plugged into the analyzer. Exclusive Program Verify switch allows visual display of

the program stored in the console or any module that is plugged in. All solid state, internally stabilized, instant warm-up. Low light sensitivity: .0002 ft. candles. Filtration display range: - 999 to + 999 units. Density range: greater than 4.00. Exposure time display range: .1 to 199.9 seconds. UL approved. 12 month warranty. Includes dust cover and integrator.



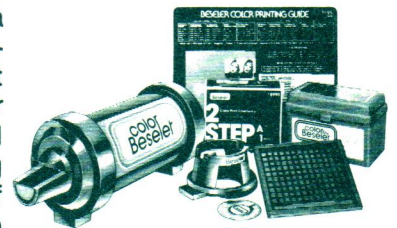
Cat. 8177 Audible/Repeating Enlarging Timer

A new electronic timer with 0.1 to 110 second range and an audible "metronome" tone. The timer can produce a "beep" every second to allow burning and dodging operations to be performed precisely. A switch on the timer allows for audible or silent operation. Dual time controls and a 10X range selector provide precise setting of exposure times throughout the entire range. Luminous dials and a large luminous "Print" button allow for easy operation in the dark. The timer has two grounded outlets, one for the enlarger and the other for a safelight. Each can handle up to 500 watts - adequate for any enlarger. Safelight is automatically switched off when focusing or exposing. A receptacle is provided for an accessory foot switch. Timer has a rugged, all metal case and built in stand. 12 month warranty.



Color by Beseler

Beseler offers a wide range of processing equipment and chemistry for making beautiful prints. Processing drums capable of handling prints up to 16" x 20", motorized agitators, tanks, reels and other helpful tools are available from your Beseler dealer. With Color by Beseler 2-Step, you can produce fantastic color prints from negatives in as little as two minutes! Develop your color negatives with CN2. Process slides with E6, and make prints from those slides with 3-Step.



Beseler Dust Gun

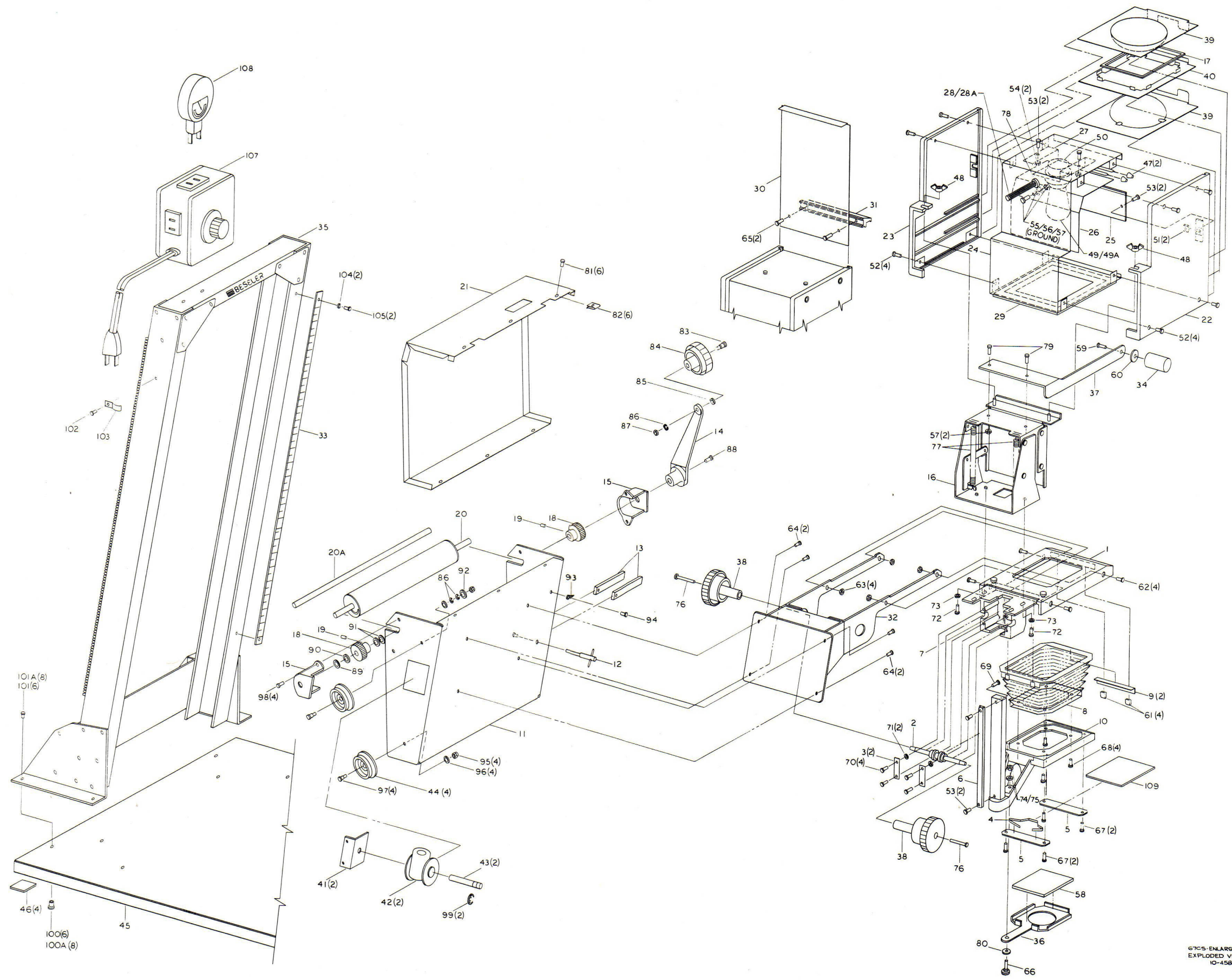
Beseler's Dust Gun is a safe, dry, all-purpose dust and lint remover specifically designed to be used with photographic equipment. The non-toxic gas removes microscopic dirt, dust and any other dry foreign material from negatives, instruments and more. The inert, non-flammable gas has been triple filtered to insure purity.

A unique 3-way valve is available to enable the user to regulate the intensity of the burst. Available in: 12 oz. spray can with built in 3-way adjustable valve and extension tube (Catalog No. 8550). 12 oz. refill which fit most standard trigger valves (Catalog No. 8552). 3 oz. portable spray can (Catalog No. 8554).





Beseler Photo Marketing Co., Inc. 8 Fernwood Rd., Florham Park, N.J. 07932



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