Film-Tech

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Kodak Pageant Sound Projector

Model AV-256-TR

Specifications

Dimensions in inches and (mm)

	Width	Length	Height	Approx. Weight lbs & (kg)
Projector packed in corrugated case for shipping	15 (381)	15¾ (400)	18½ (470)	44 (20)
Projector complete	11½ (292)	13⅜ (340)	16¾ (426)	37½ (17)
Speaker unit (Case cover)	6⅝ (168)	12¾ (324)	13½ (343)	6¼ (2.8)

Power Service Required:
105- to 125-volt, 60 Hz

Power Consumed by Projector and Amplifier on 115-Volt Power Line:
950 watts with a 750-watt projection lamp
1200 watts with a 1000-watt projection lamp
1400 watts with a 1200-watt projection lamp

Projection Lens:
The lens supplied is a KODAK Projection EKTANAR Lens, 2-inch *f*/1.6.

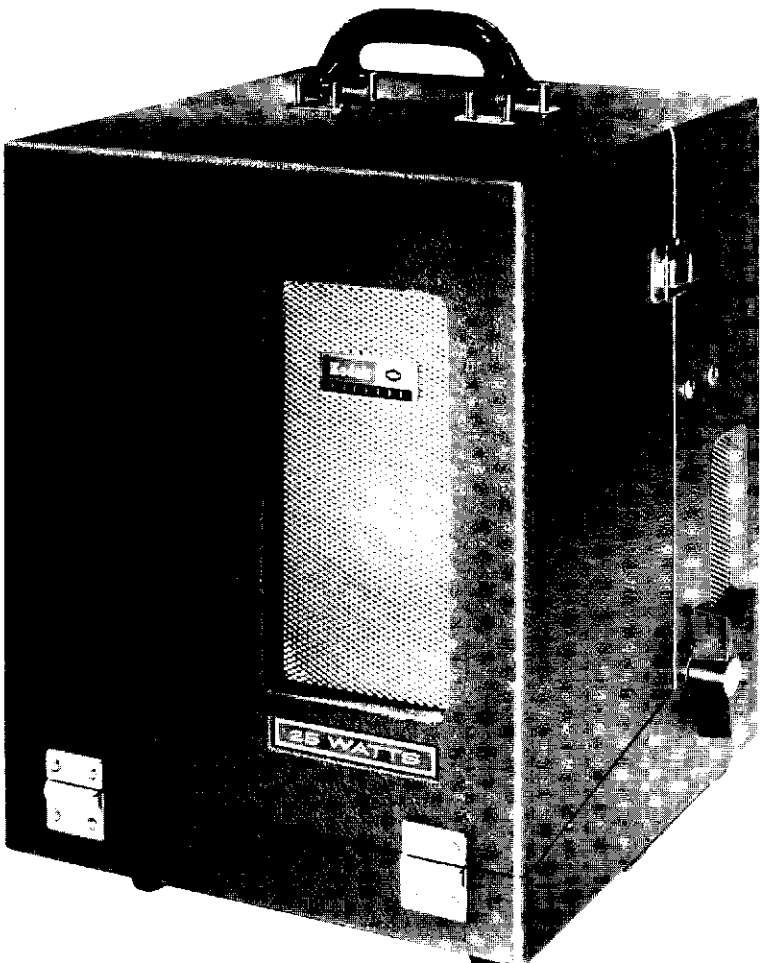
Projection Lamp:
The lamp supplied is a 750-watt, 115-volt, T-12 bulb, C-13D filament, medium prefocused base, ANSI Code DDB. A 1000-watt, 115- to 120-volt, T-12 bulb, C-13D filament, medium prefocused base, 25-hour rating, ANSI Code DFT, or a 1200-watt, 115-volt, T-12 bulb, C-13D filament, medium prefocused base, 10-hour rating, ANSI Code DHT can be used.

Amplifier (completely transistorized):
Rating (IHF Specifications A-201 1966)
Music Power: 25 watts
Sensitivity: 1 mv film channel (equalized)
10 mv microphone channel
300 mv phono channel
Distortion: 2% maximum
Frequency Response: 40 to 18,000 Hz ± 3db
Hum and Noise: −50 db with open circuit input

Speaker:
11 x 6-inch oval, PM, 16-ohm voice coil

Exciter Lamp:
ANSI Code BSK, 6-volt, 1 A, T-5 bulb, single-contact, medium prefocused base

Sound Pickup:
Silicon Solar Cell



Contents

SERIAL NUMBER

The serial number is stamped on the nameplate below the thread light receptacle on the amplifier control panel (see Figure 1). Make a record of this number and keep it in a safe place. The serial number should be included in any correspondence about the projector.

NOTE

Carefully read and follow the operating instructions presented in this manual. After a preliminary reading of the instructions, practice threading, projecting, and rewinding with a reel of sound film so that you acquire an easy familiarity with the machine before the first show.

How to Use the Kodak Pageant Sound Projector

MODEL AV-256-TR

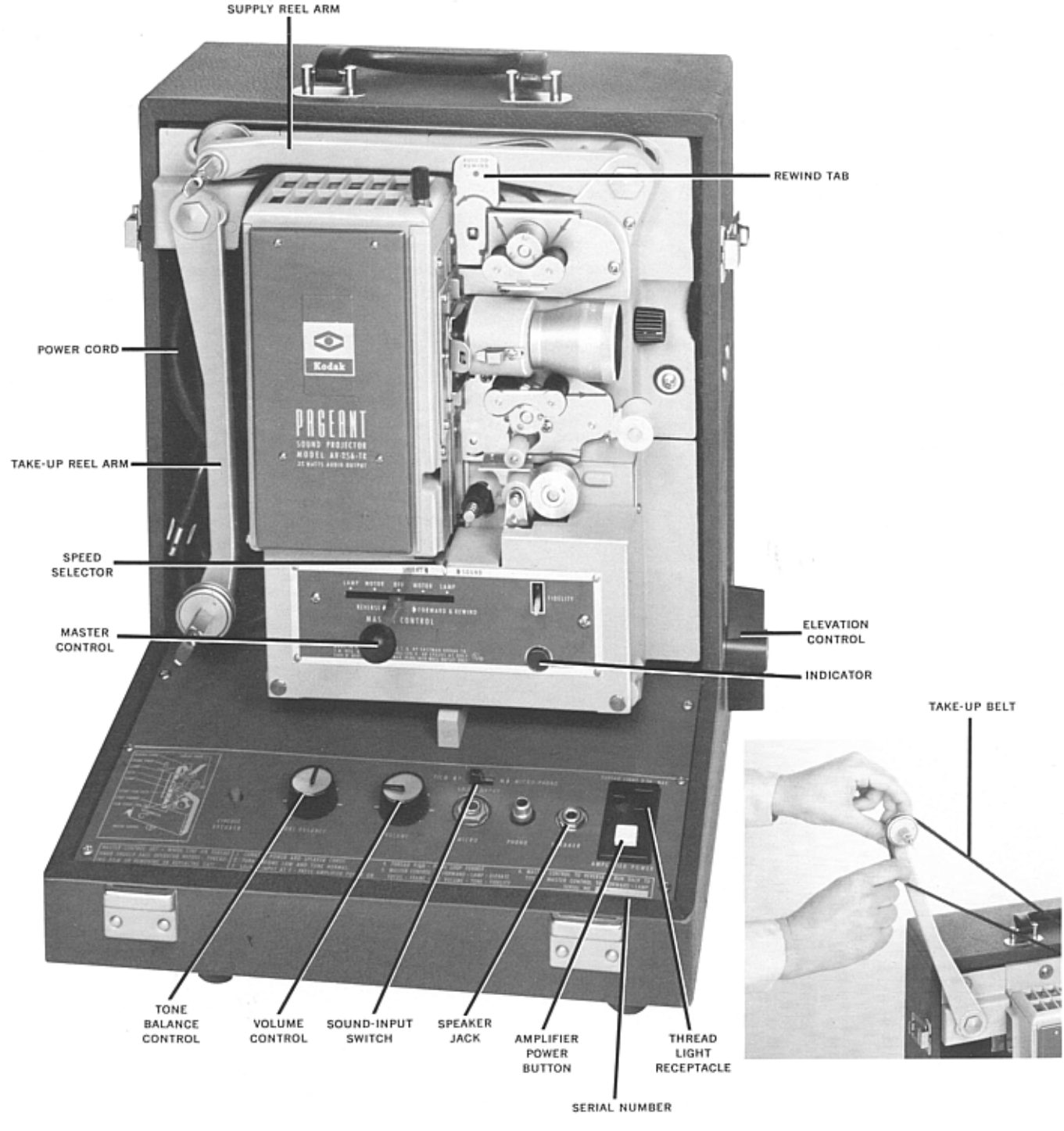

SUPPLY REEL ARM
REWIND TAB
POWER CORD
TAKE-UP REEL ARM
SPEED SELECTOR
MASTER CONTROL
ELEVATION CONTROL
INDICATOR
TAKE-UP BELT
TONE BALANCE CONTROL
VOLUME CONTROL
SOUND-INPUT SWITCH
SPEAKER JACK
AMPLIFIER POWER BUTTON
THREAD LIGHT RECEPTACLE
SERIAL NUMBER
Kodak
PAGEANT
SOUND PROJECTOR

FIGURE 1

Setting Up

Place the projector on a firm table or other support of convenient height. Set up the projection screen. Be guided as to the relative location of the projector and screen by the information on page 14. Unlatch the cover locks, tilt the cover away from the projector and lift it off.

Lift the SUPPLY REEL ARM (Figure 1) up as far as it will go. Lift the TAKE-UP REEL ARM up until the TAKE-UP BELT can be put on the take-up pulley. Do not twist the belts. *When projecting film on 50-foot or 100-foot reels, or film on reels with cores smaller than two inches in diameter, remove the belt from the supply pulley.* With these smaller reels, allow the belt to rest between the pulley and the arm. The belt should be replaced on the pulley when the projector is run in reverse or when film is being rewound.

Remove the POWER CORD from its storage space. This projector is equipped with a 3-wire power cord and a 3-prong polarized plug for direct connection to a 105- to 125-volt, 60 Hz wall receptacle of the grounding type. By using a suitable power cord adapter, it is possible to plug into a conventional wall receptacle. When you do this, connect the grounding wire attached to the 2-prong adapter to a suitable ground. For convenience it is suggested that in those locations where the projector will be used frequently, the usual 2-prong receptacle be replaced with a 3-prong polarized receptacle, properly grounded.

If an extension power cord is used, be sure that it has adequate current-carrying capacity (No. 16 AWG wire or larger) to avoid overheating the cord, and that it is as short as possible to prevent excessive voltage drop.

Position the speaker as close to the screen as possible. Uncoil enough SPEAKER CABLE (Figure 2) to connect the plug to the SPEAKER JACK (Figure 1) in the amplifier. The speaker should be placed at the ear level of the audience for proper sound distribution.

Make sure that the REWIND TAB is in the position shown in Figure 1, then turn on the motor and lamp by moving the MASTER CONTROL all the way toward the front of the projector. Rotate the lens clockwise or counterclockwise until the margins of the lighted area on the screen are in focus.

Adjust the elevation by turning the ELEVATION CONTROL clockwise until the lighted area is centered on the screen.

While the projector is running forward, move the SPEED SELECTOR to SILENT or SOUND, depending upon the film being projected. To move the selector from SOUND to SILENT, push the lever to the left as far as it will go; to go from SILENT to SOUND, push the selector upward to release it—the selector will automatically move to the sound position.

Turn off the projection lamp and the motor. Turn the VOLUME CONTROL fully counterclockwise and the TONE BALANCE CONTROL to NORMAL.

Next, turn on the amplifier by momentarily depressing the AMPLIFIER POWER BUTTON; there will be a red glow in the power-on INDICATOR. Make sure that the SOUND-INPUT SWITCH is at the FILM position.

A table lamp or night light plugged into the THREAD LIGHT RECEPTACLE will give sufficient light to thread the film without the use of room light. This lamp will be automatically turned off when the projector lamp is turned on.

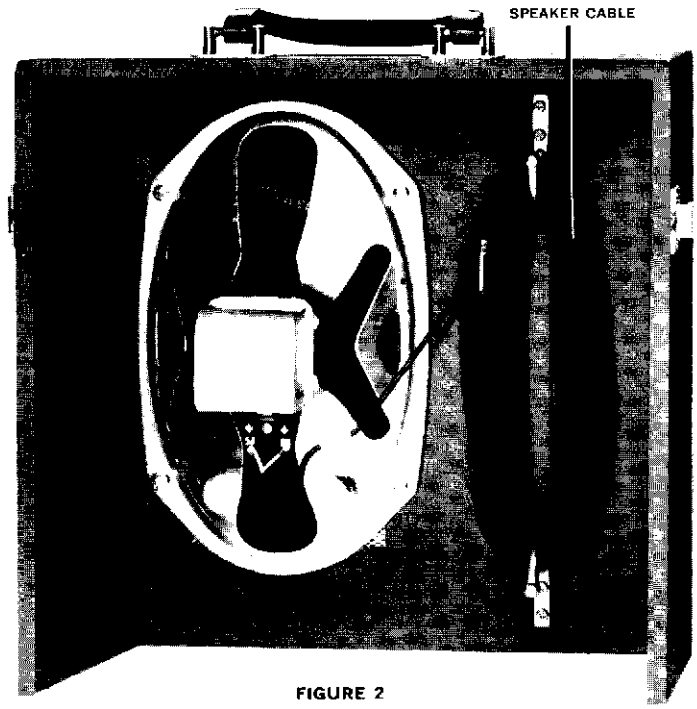


FIGURE 2

Preparation for Threading

Place the reel of film on the SUPPLY SPINDLE (Figure 3) with the film feeding clockwise off the reel and the perforations toward you. Lock the reel onto the spindle with the LATCH. Place an empty reel on the TAKE-UP SPINDLE and lock it in place.

Make sure that the rewind tab is latched in the vertical position.

Check to see that the speed selector is properly set for the film to be projected.

Open the supply and take-up sprocket CLAMPS.

Open the GATE by pushing forward on the tab until it latches.

Turn the trial THREAD KNOB until the white line on the knob is toward you. With the knob in this position, the pulldown claw will be withdrawn from the film channel.

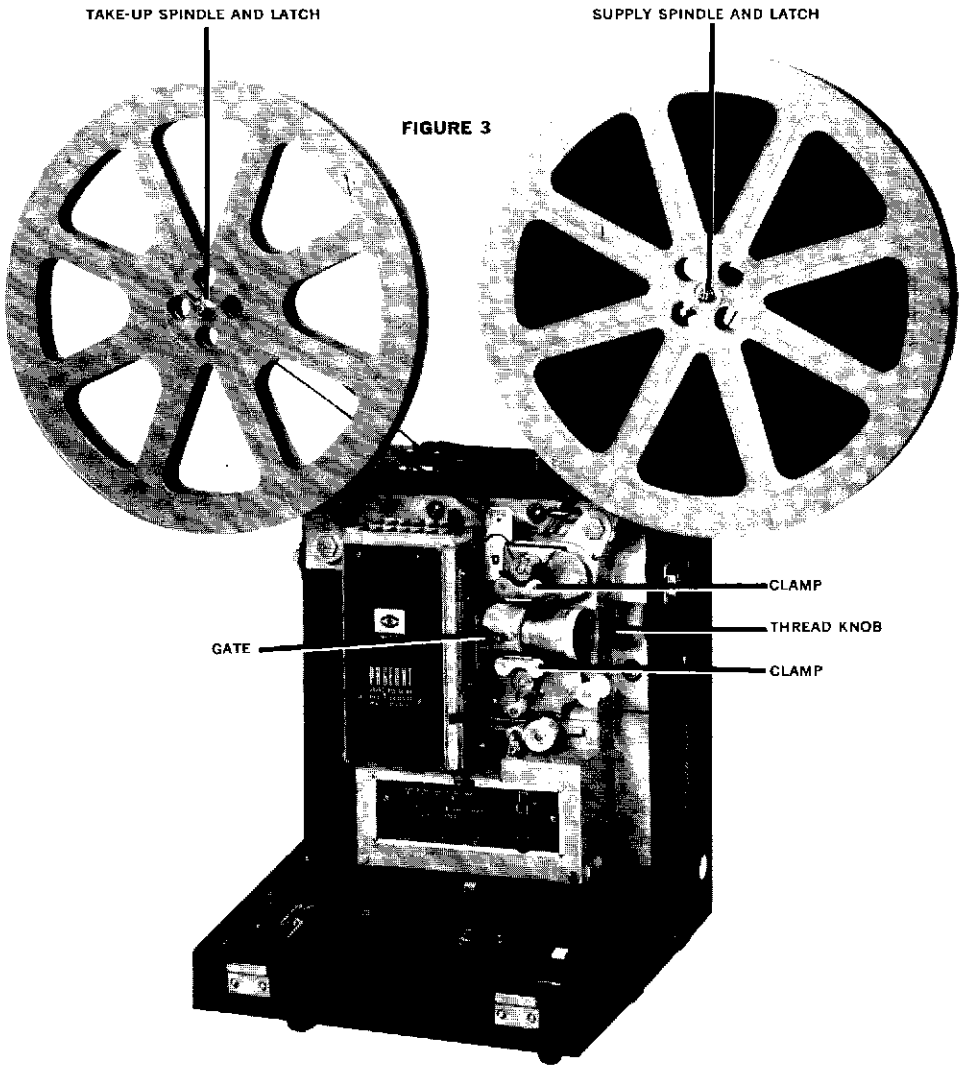


FIGURE 3

Threading for Sound or Silent Pictures

Draw off about five feet of leader. Grasp the leader near the supply reel and insert it between the upper sprocket and clamp, engage the perforations with the sprocket teeth, and close the clamp. (See Figure 4.)

Place the leader between the top and bottom EDGE GUIDES of the film channel. Close the gate by pressing on the GATE LATCH. Form the upper loop to the red dot on the REWIND TAB. (See inset.)

Thread the leader under the LOOP-FORMING ROLLER. The leader should just touch the roller (*not* as shown in Figure 4).

Pull back the sound drum PRESSURE ROLLER and place the leader over the roller and under the SOUND DRUM. Release the roller, making sure that the leader is between the flanges.

Pass the leader behind the DAMPER ROLLER and between the take-up sprocket and clamp. Engage the perforations with the sprocket teeth and close the clamp. Make sure that the leader is against the damper roller.

Press down the loop-forming roller as far as it will go and then release it. This action will correctly position the upper and lower loops. Turn the trial thread knob to engage the pulldown claw in the leader perforations. Figure 4 shows the positions of the clamps, gate, and leader *after* the loop-forming roller has been pressed down and released.

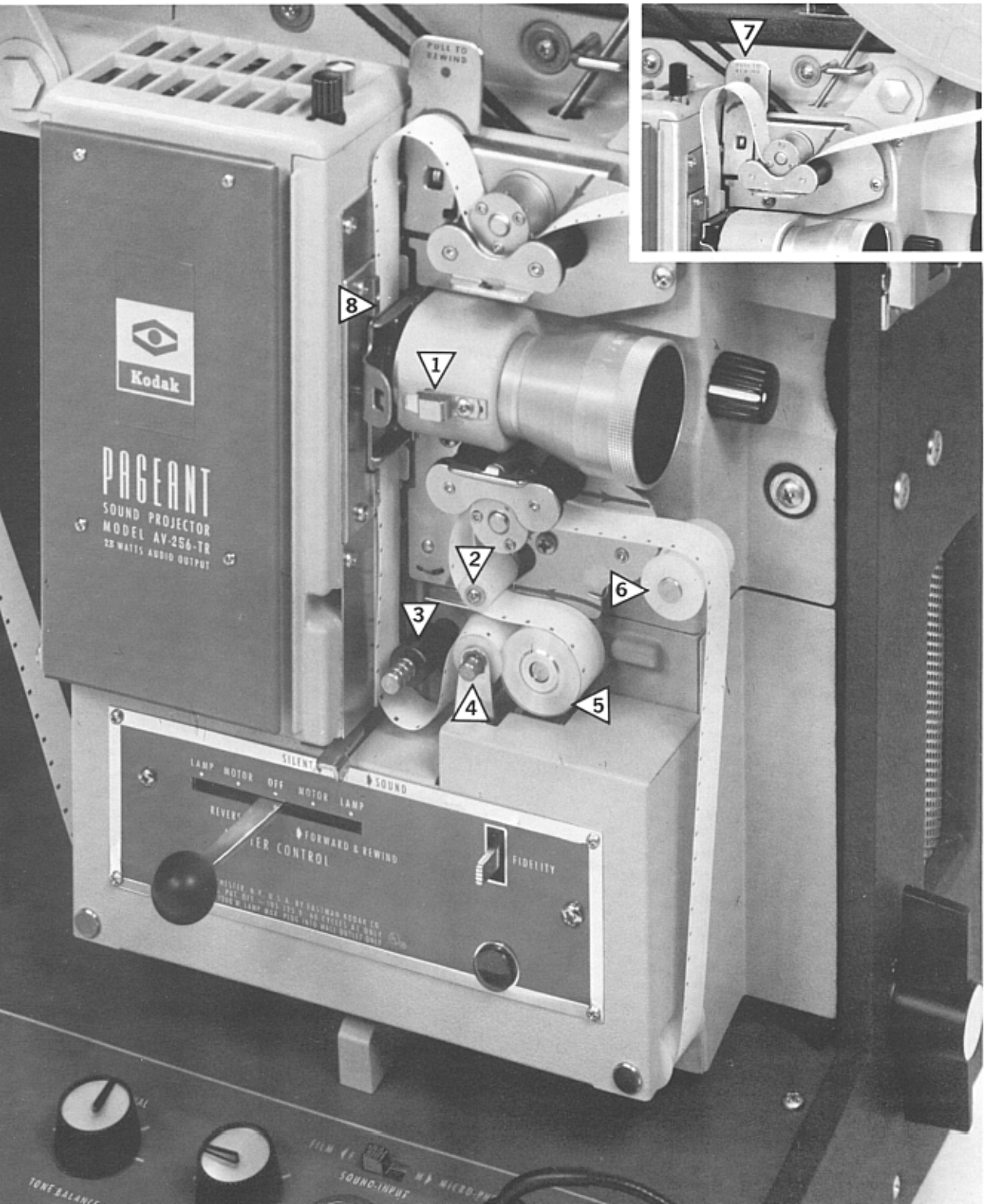
Bring the leader over the SNUBBER ROLLER and under the two rollers on the bottom of the master-control cover. Insert the end of the leader into the slot in the core of the take-up reel. Take up the slack between the lower sprocket and the take-up reel.

For sound projection only: Move the sound-input switch to FILM. Turn on the amplifier by depressing the amplifier button.

For silent projection only: While the projector is running, set the speed selector at SILENT.

Note: Project at SILENT speed; rewind at SOUND speed.

1 GATE LATCH
2 DAMPER ROLLER
3 LOOP-FORMING ROLLER
4 PRESSURE ROLLER
5 SOUND DRUM
6 SNUBBER ROLLER
7 REWIND TAB
8 EDGE GUIDES


PULL TO REWIND
Kodak
PAGEANT
SOUND PROJECTOR
MODEL AV-256-TR
SILENT
LAMP MOTOR OFF MOTOR LAMP
SOUND
FORWARD & REWIND
FIDELITY
1
2
3
4
5
6
7
8

Alternate Threading for Silent Pictures

Draw off about five feet of leader. Insert the leader between the upper sprocket and clamp, engage the perforations with the sprocket teeth, and close the clamp. (See Figure 5.)

Place the leader between the top and bottom edge guides of the channel. Form the upper loop as shown and close the gate by pressing on the gate latch.

Form the lower loop as shown and thread the leader between the lower sprocket and clamp. Engage the perforations with the sprocket teeth and close the clamp.

Turn the trial thread knob to engage the pulldown claw in the leader perforations.

Pass the leader over the snubber roller and under the two rollers on the bottom of the master-control cover. Insert the end of the leader into the slot in the core of the take-up reel. Take up the slack between the lower sprocket and the take-up reel.

While the projector is running forward, set the speed selector at SILENT. Be sure to turn the motor off momentarily after changing from sound to silent speeds unless the shutter has been locked in the 3-blade position as shown in Figure 12. (See KODAK SUPER-40 Shutter, page 12.)

Note: Project at SILENT speed; rewind at SOUND speed.

Check Setup and Run the Show

Turn the trial thread knob clockwise a few times to check the threading. The pulldown claw must engage the perforations and the sprockets must feed the film.

The loops must be maintained in their correct sizes. The leader should be taut between the supply reel and the upper sprocket.

Move the master control to MOTOR (forward) and check to see that the film is running through properly.

Move the master control to LAMP.

Focus the image on the screen.

Turn the FRAMING SCREW (Figure 5) to eliminate any blank strip on the edge of the next picture that shows at the top or bottom of the screen image.

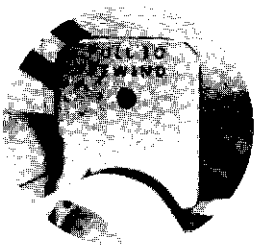
Adjust the volume control to provide comfortable listening for the audience. Focus the sound optics to get the best quality of sound reproduction by moving the FIDELITY LEVER up or down.

Check to see that the film is being taken up properly.

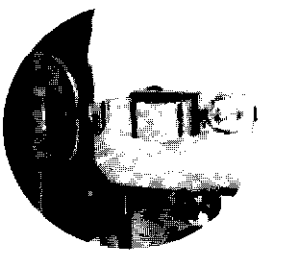
For sound projection only: Check the lower loop. If necessary depress and release the loop-forming roller. This may be done with the projector running, if desired.

To operate the projector in reverse, move the master control to REVERSE MOTOR and, if desired, to REVERSE LAMP.

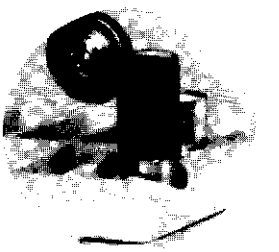
After the last frame of sound film has been projected, turn off the amplifier by momentarily depressing the amplifier button; also turn off the lamp. This will eliminate the sounds that occur when the end of the film is feeding through the projector.



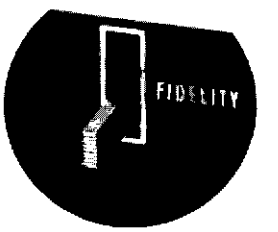
1 REWIND TAB



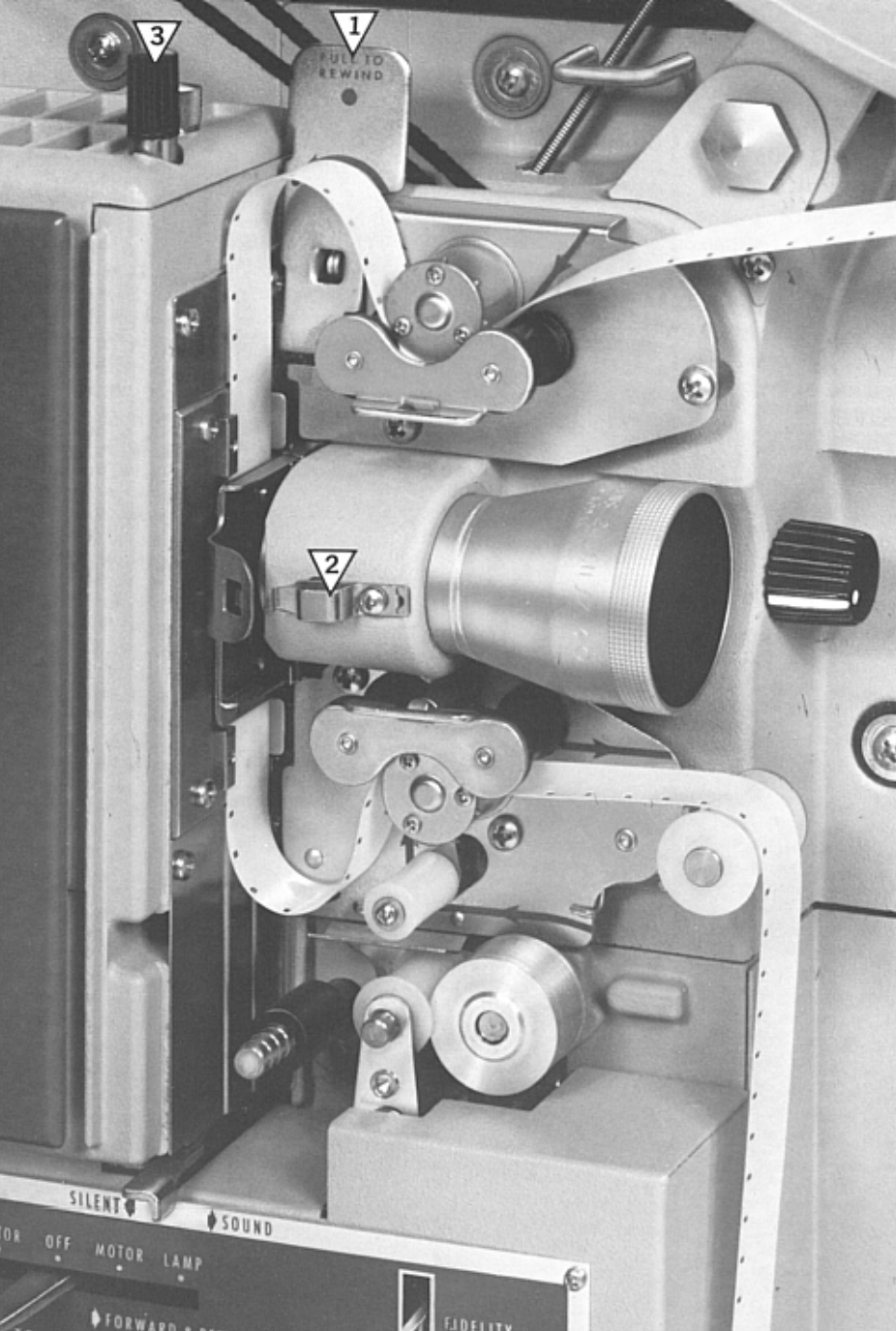
2 GATE LATCH



3 FRAMING SCREW



4 FIDELITY LEVER


3
1
PULL TO REWIND
2
SILENT
SOUND
OFF
MOTOR
LAMP
FORWARD
FIDELITY

Rewinding

To rewind the film, attach its end to the supply reel and give the reel a few turns counterclockwise to bind the film. (See Figure 6.)

Make sure that the film is not twisted between the reels.

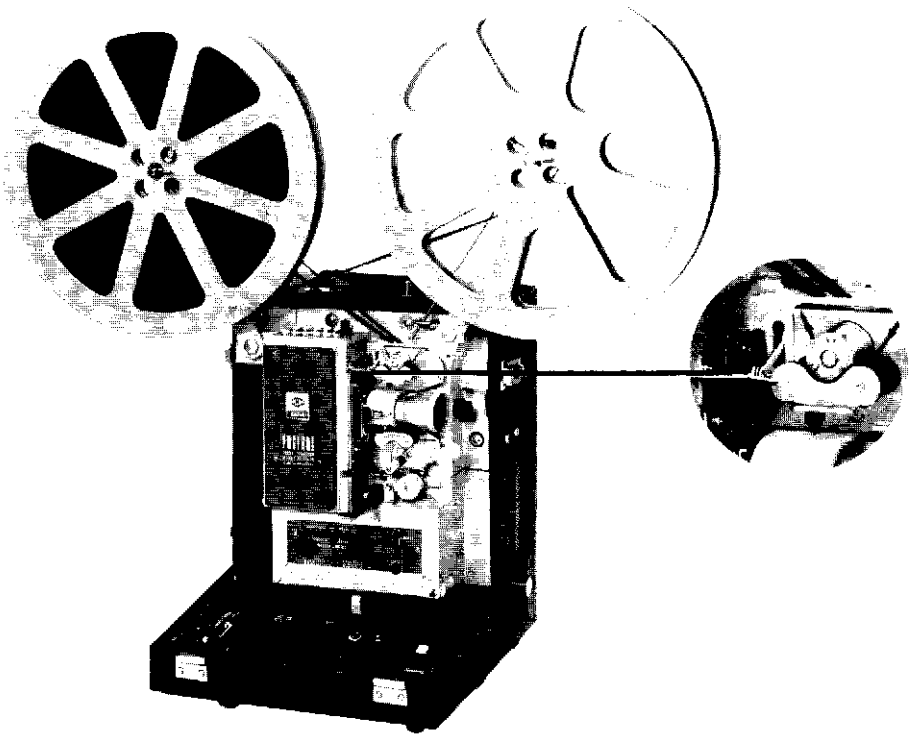
Move the master control to the REWIND position.

Lower the rewind tab to its horizontal position; the tab will block the film channel.

Set the speed selector at SOUND; this is necessary for all rewinding.

After all the film has been rewound onto the supply reel, latch the rewind tab in the vertical position and move the master control to OFF.

FIGURE 6



After the Show

Following the projection and rewinding of all reels of film that are to be shown:

Unplug the power cord and fold it into its storage space.

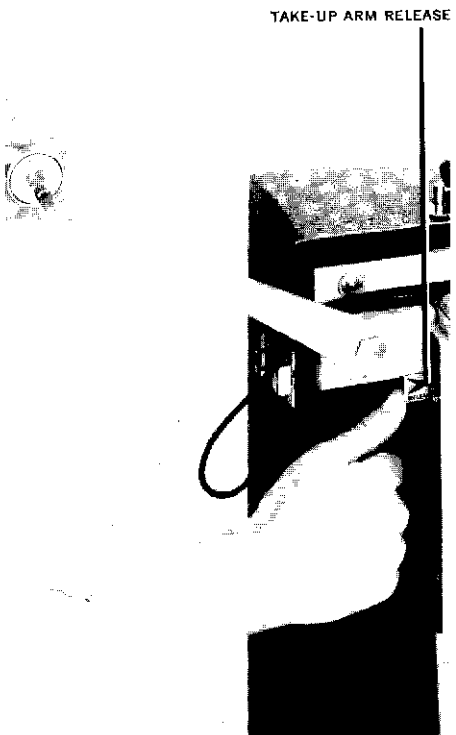
Remove the take-up belt from the take-up pulley. Raise the take-up arm slightly, push in the TAKE-UP ARM RELEASE (Figure 7), and lower the arm to its storage position. Swing the supply arm downward as far as it will go.

Lower the projector by turning the elevation control counterclockwise as far as it will go.

Unplug the speaker cable and wind it around its storage hooks.

Replace and fasten the projector cover.

FIGURE 7



Microphone • Phonograph • Tape Recorder

The projector can be used as a PA system, or to provide accompaniment for silent films.

Before you use either the microphone or phonograph input on the projector, move the sound-input switch to MICRO-PHONO (Figure 8).

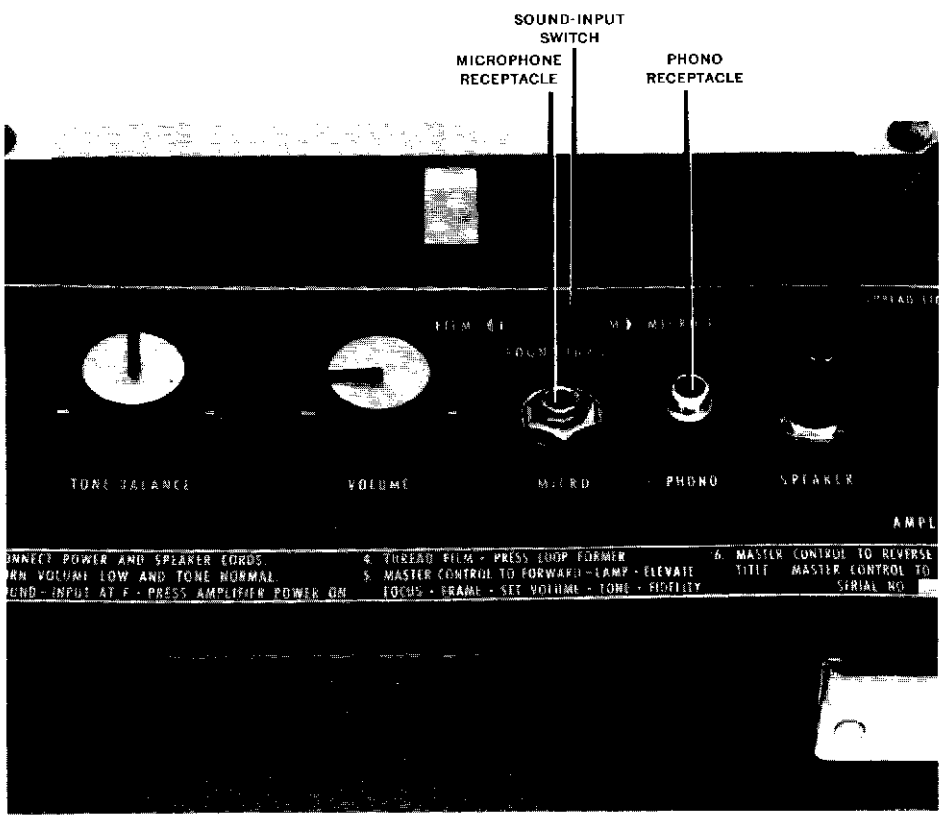
Microphone—Insert the microphone plug into the MICROPHONE RECEPTACLE. Make sure the plug is in all the way. The microphone volume is regulated by the volume control. (Adjust the tone balance control to the desired position.)

Phonograph or Tape Recorder—Connect your record player (or tape recorder) by inserting its output plug in the PHONO RECEPTACLE. The plug must be all the way in. The output volume is dependent upon the adjustment of the volume control on the projector. Maximum frequency response of the amplifier will be obtained when the tone balance control is turned counterclockwise as far as it will go.

Note: The phonograph input circuit of the projector is high impedance to match crystal or ceramic phonograph pickups; it will also accept the output of a preamplifier, which must be used if the phonograph pickup is of the magnetic type.

The microphone input is designed for use with a low-impedance dynamic microphone.

FIGURE 8

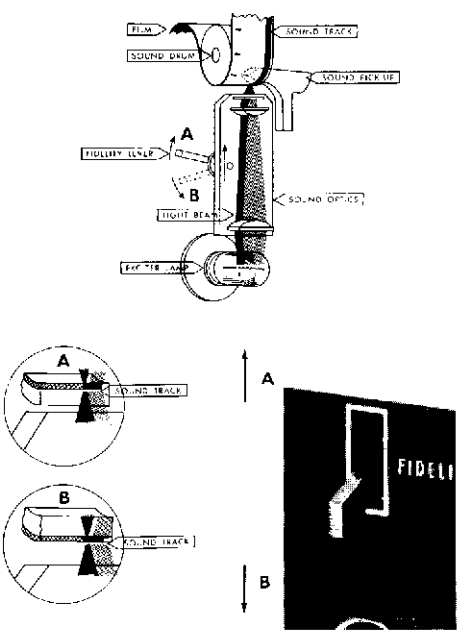


Sound Optics

Focusing the beam of light from the exciter lamp is extremely important; it is accomplished by moving the fidelity lever. The sound track, running along one edge of the film, can be on either surface of the film, depending upon what type of film is being used.

Figure 9 illustrates the proper position of the beam for each of the two types of film: one threaded with the emulsion side on top and away from the sound optics (A), and the other with the emulsion side on the bottom and toward the sound optics (B).

FIGURE 9



Kodak Super-40 Shutter

The Model AV-256-TR Projector is equipped with the SUPER-40 Shutter (Figure 10), which provides 40 percent more screen illumination in the 2-blade position than it does in the 3-blade position.

Action of the SUPER-40 Shutter

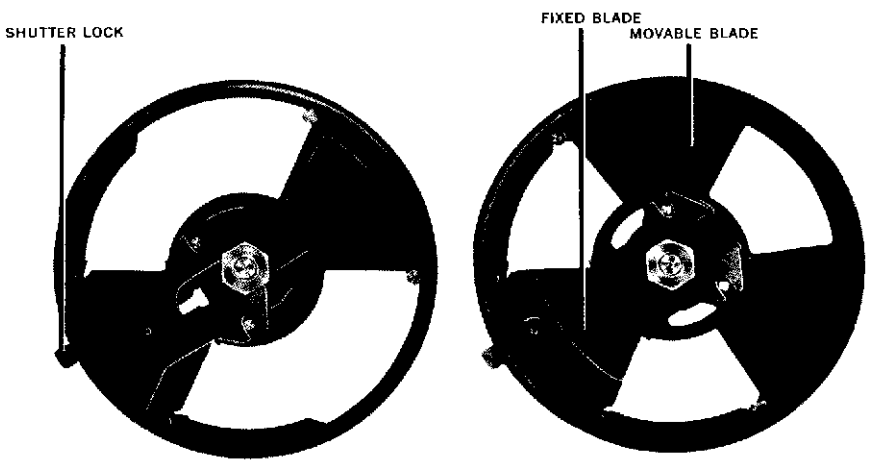
At the 3-blade position (for silent speed), there are a minimum of fifty-four light interruptions per second. This position is maintained by spring tension. The tension counteracts the centrifugal force exerted by a weight that is linked to the two movable blades.

When the speed selector is moved to SOUND, the additional centrifugal force that results from the faster speed of the shutter overcomes the spring tension. The movable blades rotate on their axis and overlap in a position opposite the fixed blade. Now the shutter will operate in the 2-blade position with 40 percent more screen illumination.

Sound Speed—If the SUPER-40 Shutter in the 2-blade position provides too much illumination, it can be locked in the 3-blade position. When the projector is operated at sound speed, the shutter will automatically shift (if not locked) from the 3-blade position to the 2-blade position.

Silent Speed—The SUPER-40 Shutter will remain in the 3-blade position if the projector is started in silent speed. If the projector is started in sound speed and then shifted to silent speed, the shutter cannot return to the 3-blade position unless the motor is stopped momentarily.

FIGURE 10



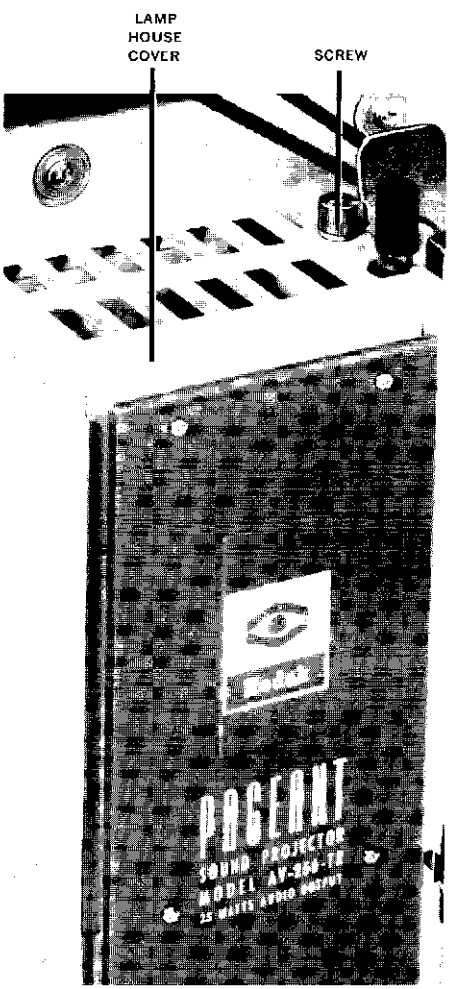
SUPER-40 Shutter in 2-Blade Position

SUPER-40 Shutter in 3-Blade Position

To Lock the SUPER-40 Shutter in the 3-Blade Position:

Stop the projector; loosen the screw on the LAMP HOUSE COVER (Figure 11); remove the cover. Turn the trial thread knob until the SHUTTER LOCK (Figure 12) is visible. Hold the trial thread knob to prevent rotation of the shutter and, using a screwdriver or similar object, push the shutter lock *down* as far as it will go. Replace the lamp house cover and tighten the screw. To unlock the shutter, proceed as above, except that the shutter lock must be moved *up* as far as it will go.

FIGURE 11



Operating Tips

The perforations in the film should be toward you as film comes off the bottom of the supply reel. If they are not, the film has not been rewound or was twisted while being rewound.

If the gate is left open, the projected picture will be out of focus.

Adjust the LAMP CENTERING SCREW (Figure 12) without film in the gate if the brightness of the screen is not uniform.

If the picture is unsteady, check the upper and lower loops; these must be maintained. The lower loop should not touch the master control cover or the loop-forming roller. The sprocket teeth must show through the film perforations. Make sure that the gate and the sprocket clamps are closed.

If loss of lower loop occurs: *threaded for sound or silent pictures, page 6*—quickly press down the loop-forming roller as far as it will go while the projector is running and then release the roller; *threaded for silent projection, alternate method, page 8*—stop the motor immediately and re-form the loops.

If the projector is stopped during the projecting of a reel of sound film, turn the trial thread knob several revolutions clockwise to take up any slack between the lower sprocket and the sound drum.

If there is no sound, check to make sure that:

Speaker cord is connected.

Amplifier is turned on—depress amplifier power button and/or circuit breaker.

Sound track is overriding edge of sound drum properly.

Film is between the flanges of sound drum pressure roller.

Exciter lamp is not burned out and is seated on all three studs, page 19.

Sound-input switch is at **FILM**.

If the sound quality is not up to par, check to make sure:

Speed selector is at proper position.

Lower loop is of the proper size.

Film is snug around sound drum and drum is clean.

Volume is not too high.

Tone balance is correctly adjusted.

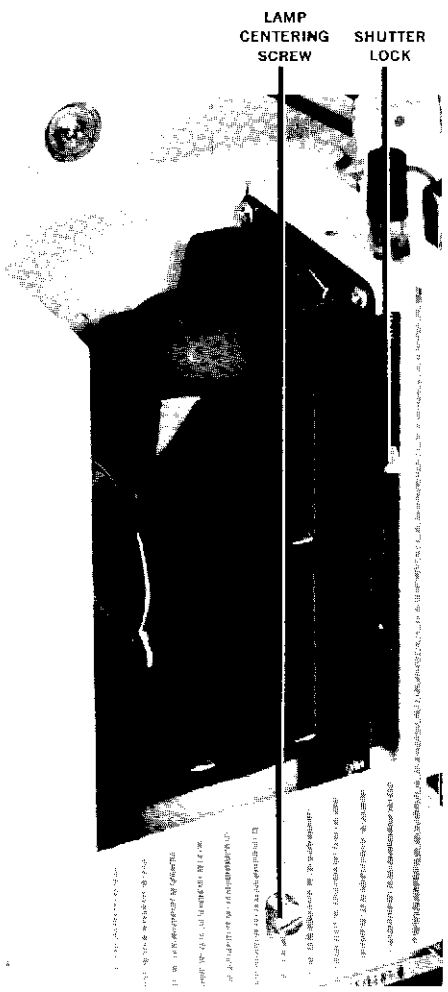
Fidelity lever is adjusted for correct sound optics focus.

Film sound track is of good quality, and clean.

Sound optics unit has been properly seated after cleaning.

Sound is synchronized with the picture. If it is not, the cause may be an improperly formed lower loop. To re-form the loop, press down the loop-forming roller while the projector is running.

FIGURE 12

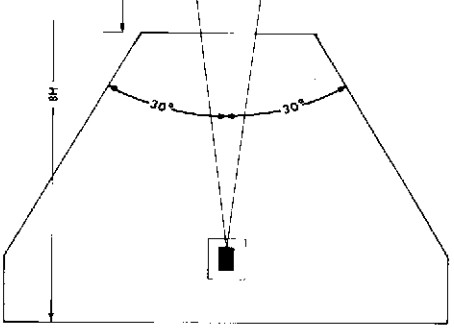


Seating Arrangements

Matte, Lenticular, or KODAK EKTALITE Projection Screen

The diagram directly below shows the best viewing area for matte, lenticular, and KODAK EKTALITE screens.

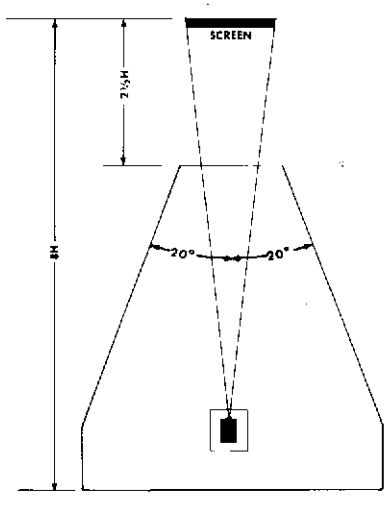
The seats nearest the screen should not be closer than twice the height of the picture (2H); the rear seats should not be farther than 8 times the height of the picture (8H).



Beaded Screen

The diagram below shows the best viewing area for beaded screens.

The seats nearest the screen should not be closer than 2½ times the height of the picture (2½H); the rear seats should not be farther than 8 times the height of the picture (8H).



Screen · Lamp · Lens Combinations

Proper selection of screen, lamp, and lens for your particular setup is important. The screen image should be of adequate size and brilliance for comfortable viewing. With the wide variety of lamps and lenses available for your PAGEANT Projector, you can tailor your equipment to meet this requirement.

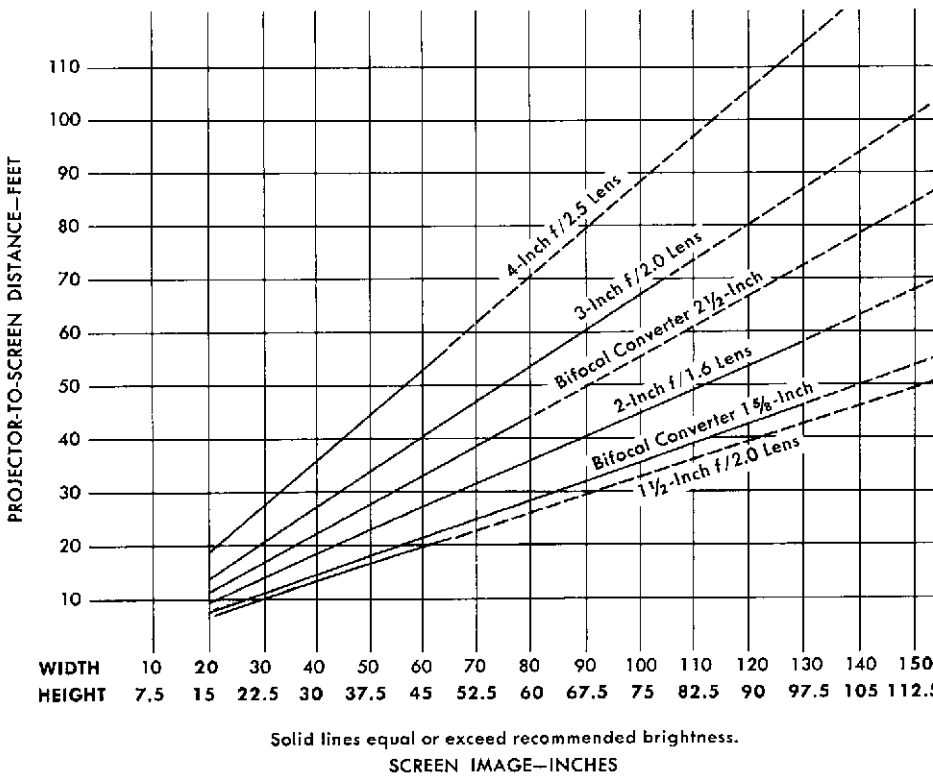
The chart shows the relation between projection distances and screen sizes for each of the currently available lenses. It is best to use a lens that provides a screen image of a height that is not less than one-eighth of the distance from the screen to the back row of seats. If the image is smaller than this, the viewers in the back rows will not be able to see the fine detail in the pictures.

Make sure that the screen image is neither too bright nor too dark. If it is too bright, flicker may become objectionable; if too dark, detail will be lost in the shadow areas of the pictures.

Shown in the table are the maximum image widths or heights for adequate illumination on matte screens and on lenticular or beaded screens with those lamps recommended for use. These maximum widths or heights are for good projection conditions in a darkened room; they will have to be somewhat less if there is much stray light in the room.

Projection Lamp Wattage	Maximum Image Width or Height in Inches in a Darkened Room*							
	Shutter in 3-Blade Position				Shutter in 2-Blade Position			
	Matte Screen		Lenticular or Beaded Screen		Matte Screen		Lenticular or Beaded Screen	
	W	H	W	H	W	H	W	H
750	60	45	85	64	70	53	100	75
1000	70	53	100	75	80	60	120	90
1200	75	56	110	83	90	68	130	98

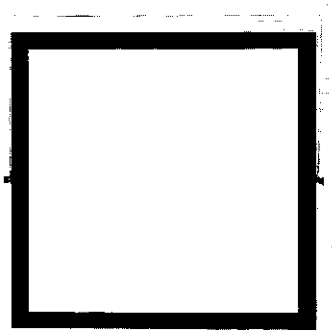
*With 2-inch lens alone, or with CINE-KODAK Bifocal Converter.



Accessories

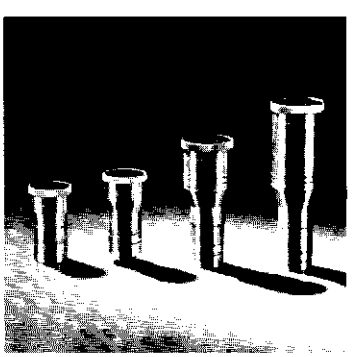
KODAK EKTALITE Projection Screen, Model 3 (40x40)

The double-curved aluminum surface of this rigid screen will reflect approximately 5 times the light that a conventional screen will return. In addition, the EKTALITE Screen will reject stray light that originates from outside the projection area. The result is a brilliant projected image with excellent color saturation and contrast, even in brightly lighted areas.



KODAK Projection EKTANON Lenses

Three EKTANON Lenses are available for KODAK PAGEANT Sound Projectors: 1½-inch *f*/2.0, 3-inch *f*/2.0, and 4-inch *f*/2.5. A 2-inch *f*/1.6 KODAK Projection EKTANAR Lens is standard equipment with the projector. Consult the chart on page 14 to determine the relationship of screen width and projector to screen distance.

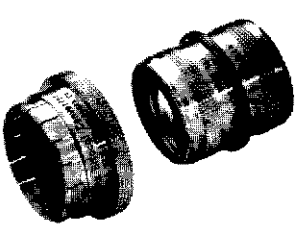


KODAK Microphone, Model PA-8

This microphone, equipped with a 0.250-inch diameter standard telephone plug on the end of an 8-foot cord, is easily held in the hand. It may be used for commentary with films or to convert the projector to a public address system.

CINE-KODAK Bifocal Converter (for KODAK Projection EKTANAR Lens, 2-inch *f*/1.6)

Shortens the effective focal length of the projector lens to 1⅝ inches or lengthens it to 2½ inches, depending on which end of the converter is placed next to the lens.



Replacing Projection Lamp and Cleaning Lenses

Projection Lamp: Loosen the lamp house cover screw and lift off the lamp house cover. (See Figures 11 and 13.)

WARNING: High-wattage lamps get very hot in use. Make sure enough time is allowed before you handle the lamp. Cooling can be accelerated by running the projector without film (and with the lamp off).

Remove the lamp by pushing it down, twisting it counterclockwise one quarter of a turn and lifting it out.

Replace the lamp with the larger flange on the lamp base facing toward the projection lens. Push the lamp down and give it a quarter-turn clockwise to lock it in position. Replace the lamp house cover and tighten the screw.

If necessary, before replacing the cover adjust for evenness of illumination by turning the lamp centering screw with no film in the gate (Figure 14). Use a matte screen for evaluation.

Cleaning Lenses: The projection and condenser lenses should be cleaned with care. Remove the projection lens by drawing it out of the lens holder. With a soft, lintless cloth or KODAK Lens Cleaning Paper, carefully wipe the front and rear lens surfaces. Do not use a wet cloth; if moisture is required, breathe on the lens or use a drop of KODAK Lens Cleaner.

WARNING: The use of treated papers or cloths can harm the LUMENIZED surface.

To clean the condenser lens and reflector, remove the lamp, push the condenser lens ARM inward (in the direction of the arrow), and lift out the assembly. Carefully wipe the front and back surfaces of the lenses. If the inside surfaces need cleaning, pry out the RETAINING SPRING (Figure 13) and remove the lenses. Clean both surfaces of each lens. Replace the lenses with the matching curved sides inward. Replace the assembly; apply a light pressure forward while moving the arm outward to lock the condenser-mount ears under the lugs in the lamp housing.

Clean the reflector with a soft, lintless cloth or KODAK Lens Cleaning Paper.

Replace the projection lamp and the lamp house cover.

FIGURE 13

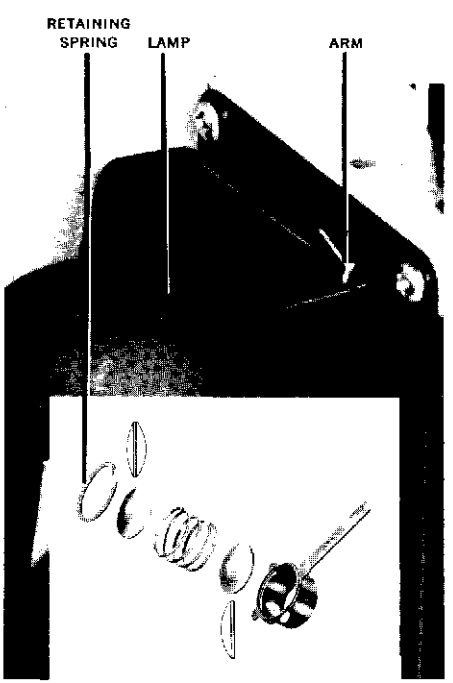
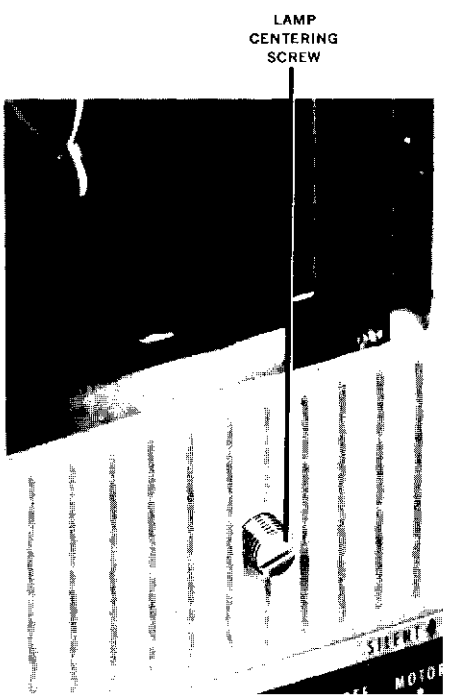


FIGURE 14



Cleaning Film Gate

The film GATE (Figure 15) should be cleaned at frequent intervals. Because of the rapid stop-and-go motion of the film, particles of the emulsion lubricant are eventually rubbed off the edges of the film and lodged on the gate; this can damage film.

Use care in removing or replacing the gate; force is not necessary.

To retract the pulldown claw, turn the trial thread knob until its white line is toward you. Remove the projection lens.

Open the gate and insert a clean CARD or piece of paper to protect the polished surfaces of the gate; then withdraw the gate.

Use a soft, damp, lintless cloth to clean the gate. If necessary, wrap the cloth around a toothpick or match stick to clean the film track.

To clean the aperture, reach through the projection-lens holder with a small, soft brush and dust off the edges of the aperture. Be careful not to chip off the black coating on the edges.

Before replacing the gate, make sure the pulldown claw is retracted. Then guide the upper notched part of the gate so that it bears against the under part of the top hinge-retaining SPRING. Push in on the gate tab to engage the top and bottom hinges.

FIGURE 15

Cleaning Sound Optics

Occasional cleaning of the sound optics is recommended.

Be sure that the power cord is not plugged in. Remove the three master control COVER SCREWS (Figure 16) and the spacer that is on the screw nearest the FIDELITY lever. Move the master control all the way to the left. Swing the master control cover outward for access to the sound optics and exciter lamp. With a soft brush, dust the top and bottom sound optics lenses. (Pull them out slightly for easy access.) The SOUND PICKUP, Figure 17, is just above the upper lens and directly behind the sound drum. The lower surface of this pick-up should be kept clean by using a soft brush. Be sure the optics unit is properly seated. Replace the master control cover.

Cleaning Sound Drum

The sound drum, sprocket-clamp rollers, and other rollers that come in contact with the film should be wiped occasionally with a soft, lintless cloth to keep them clean. Dirt particles on the inner edge of the sound drum will interrupt the light beam and cause blips and hum. To check for this condition, empty the projector and run it in reverse with the amplifier on.

Oiling

All bearings are self-lubricating and require no oiling.

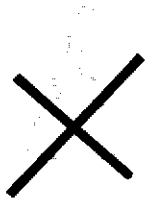


FIGURE 16

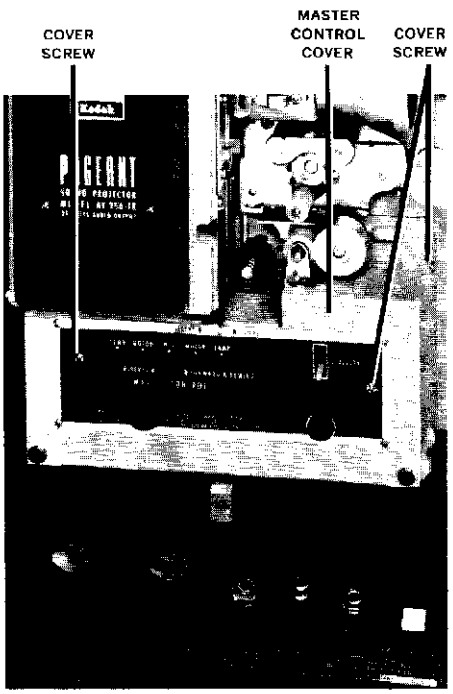


FIGURE 17

Replacing Belts

Rewind Belt—Disconnect the two ends of the worn belt, connect one of these ends to an end of the new belt and pull the new belt through. If the old belt is not in position, feed the new belt into the opening in front of the supply reel arm. Guide the belt between the flanges of the pulley until the end protrudes from the opening in the top of the housing. If the end of the belt hits the housing, use a bent paper clip to guide it. The belt should go through the BELT GUARD (Figure 18).

Take-Up Belt—If possible, this belt should be replaced by your serviceman. If such service is unavailable, use the following procedure carefully. Remove the two upper sprocket-plate retaining SCREWS and the SPACER that is located behind the retaining screw nearest the front of the projector. Lift off the upper sprocket and plate assembly. Remove the old belt. Hold the new belt as shown in Figure 19, and push the looped end of the belt into the opening in the mechanism. Make sure that the STUD is inside the loop. Continue to push the belt downward until the looped end is in the GROOVE next to the sprocket drive gear. The belt should be flat in the groove. With the belt in this position, replace the upper sprocket and plate assembly, holding it firmly in a downward direction to engage the gears until the retaining screws are tight.

Drive Belts—These belts, which seldom need replacing, should be replaced by your serviceman.

Circuit Breaker

The amplifier is protected by a CIRCUIT BREAKER (Figure 20) that will cut off power to the amplifier if excessive current flow through the amplifier should occur because of failure of some component. The circuit breaker can be reset by depressing the red button. If, with the projector connected to a 105- to 125-volt, 60-cycle a-c line, the circuit breaker will not stay closed, the amplifier should be checked by a serviceman. (It is possible for the circuit breaker to be open, even when the exciter lamp is lighted.)

FIGURE 18

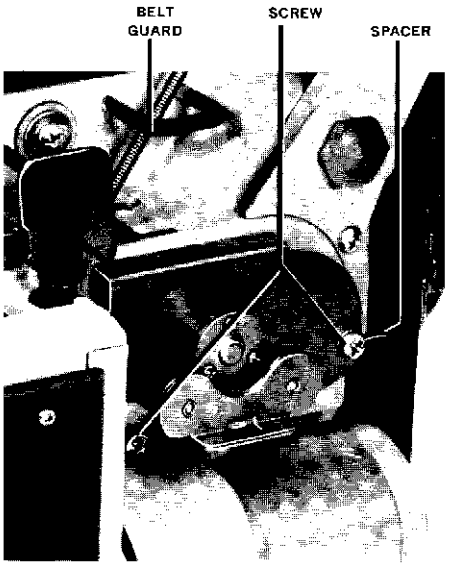
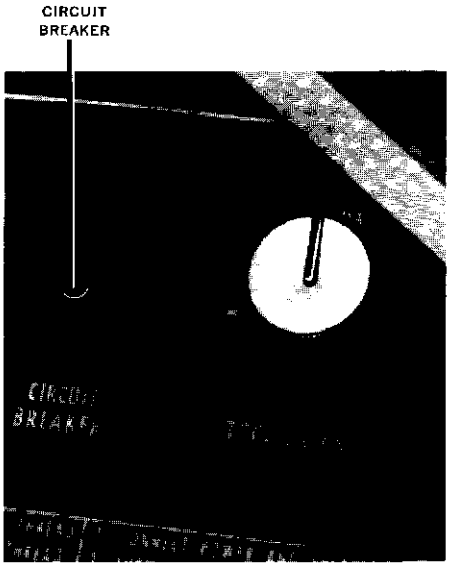


FIGURE 19

FIGURE 20



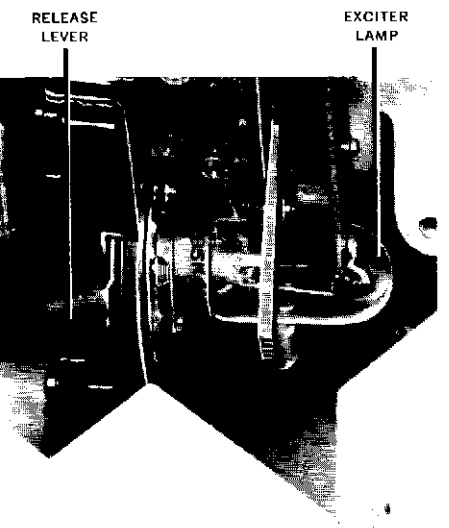
Replacing Exciter Lamp

The EXCITER LAMP (Figure 21) in this projector operates at less than its rated voltage. It should, therefore, have extremely long life and should seldom need to be replaced.

If the lamp must be replaced, swing the master control cover outward as described on page 17. Be sure that the power cord is *not* plugged in. Push the exciter lamp RELEASE LEVER down as far as it will go. Turn the lamp counterclockwise and remove it.

Place the new lamp in the socket and turn it until the large ends of the key slots in the lamp base fit over the three locating studs. The lamp will fit only one way. Turn the lamp clockwise as far as it will go. To lock the lamp in position, raise the exciter lamp release lever. Replace the master control cover.

FIGURE 21



Warranty

KODAK PAGEANT Sound Projector, Model AV-256-TR

Kodak has taken extensive care in producing this Pageant projector. Carefully follow all the instructions in this manual to get the best results and to prevent damage to this equipment.

We will repair your projector at no charge within one year after purchase, except for worn-out projector lamps and damage caused by accident or other unforeseeable event or abuse. This warranty applies only to the projector, and Kodak cannot be responsible for other losses or damages of any kind resulting from equipment failure. No other warranty, express or implied, applies to this projector.

For service during or after the warranty period you may take your Pageant projector to a Kodak Consumer Center (located in many U.S. cities). Please consult your local telephone directory under Photographic Equipment and Supplies for the locations of these centers. You may also return your projector directly or through a dealer in Kodak products to one of the following Kodak Equipment Service Centers. A note enclosed with the equipment giving details and date of purchase will help us get it back to you promptly.

Eastman Kodak Company
Central Equipment Service Center
800 Lee Rd.
Rochester, N.Y. 14650

Eastman Kodak Company
Regional Equipment Service Center
1334 York Ave.
New York, N.Y. 10021

Eastman Kodak Company
Regional Equipment Service Center
5315 Peachtree Industrial Blvd.
Chamblee, Ga. 30341

Eastman Kodak Company
Regional Equipment Service Center
1901 West 22nd St.
Oak Brook, Ill. 60521

Eastman Kodak Company
Regional Equipment Service Center
2800 Forest La.
Dallas, Tex. 75234

Eastman Kodak Company
Regional Equipment Service Center
9100 Alcosta Blvd.
San Ramon, Calif. 94583

Eastman Kodak Company
Regional Equipment Service Center
12100 Rivera Rd.
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Honolulu, Hawaii 96814

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