

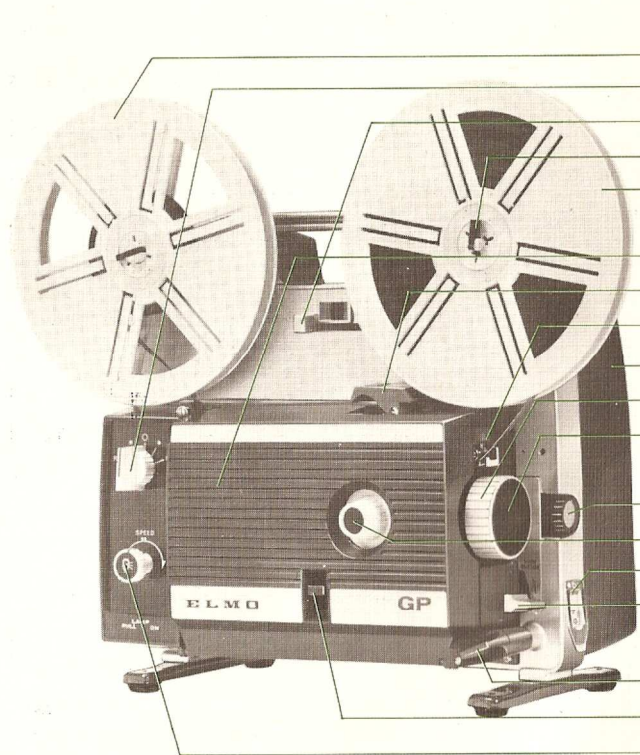


ELMO CO., LTD.  
NAGOYA, JAPAN

DUAL-8 PROJECTOR

**ELMO**  
**GP**

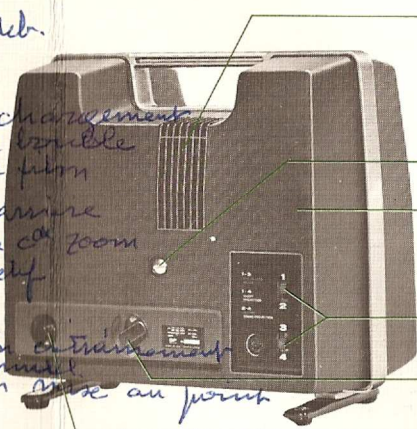
INSTRUCTION MANUAL



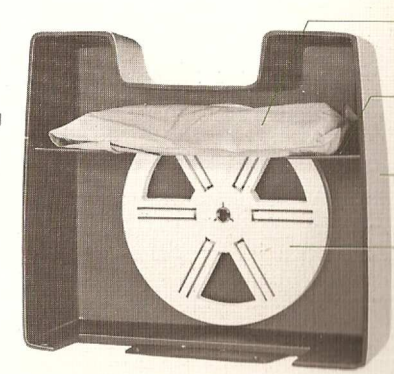
bobine à accrochage auto  
 Automatic takeup reel  
 interrupt. système  
 Motor switch  
 levier sélection format  
 Film type selecting lever  
 axe bobine débiteuse  
 Feed reel spindle  
 bobine déb.  
 Feed reel

carter latéral  
 Front housing  
 levier chargement  
 Threading lever  
 formeur  
 Loop restorer  
 entrée film  
 Threading slot  
 carter arrière  
 Rear cover  
 baquet de zoom  
 Zooming ring  
 objectif  
 Projection lens

bouton  
 Threading knob  
 bouton  
 Focusing knob  
 bouton  
 Film cutter  
 de projection ralentie  
 Slow motion lever  
 de réglage vertical  
 Tilting knob  
 cadrage  
 Framing lever  
 interrupteur lampe  
 Lamp switch  
 de vitesse  
 Speed control knob



Ventilation window  
 Rear cover attaching screw  
 Rear cover  
 E.S.S. switch  
 Voltage selector  
 Power cord socket

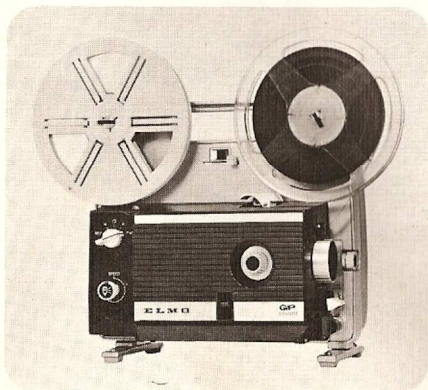


Cord holder  
 Cord shelf  
 Front cover  
 Automatic takeup reel



The new ELMO Model GP has been developed to project whichever type of 8mm film; Super 8, Single 8 or Regular 8, and to present the most stable and the brightest picture yet performed in this type of projector.

The Model GP features automatic film threading system, one-lever film type selecting device, and many other unique versatilities. You will enjoy your magnificent movies with your compact ELMO GP.



## Specification

<b>Film</b>	: Super 8, Single 8 and Regular 8(Double 8) film
<b>Film Threading</b>	: Fully Automatic Threading System
<b>Reel Capacity</b>	: 400 ft.
<b>Projection Lamp</b>	: 21V, 150W Quartz Bromine Lamp, Type EJM
<b>Projection Lens</b>	: F/1.3, 15-25mm Elmo Zoom Lens or F/1.3, 18mm Elmo Standard Lens
<b>Motor</b>	: DC Magnet Motor
<b>Projection Speed</b>	: Variable from 14 to 24 frames/second
<b>Slow Motion Projection</b>	: Possible only for the Model GP with Slow Motion
<b>Still Projection</b>	: Possible
<b>Reverse Projection</b>	: Possible
<b>Rewind</b>	: Automatic High Speed Rewind System
<b>Sound Projection</b>	: Synchronized Sound Projection possible with a combined use of E.S.S. and tape recorder.
<b>Power Cord</b>	: 1 Piece
<b>Dimensions</b>	: 29.5 x 27 x 20 cm (11.8 x 10.8 x 8 in.)
<b>Weight</b>	: 7.5 kgs. (16.5 lbs.)

## IMPORTANT!

### ● Positioning the film type selecting lever:

For Super 8 or Single 8 film projection, snap the film type selecting lever to the right, and 'S' appears in the film indicator window. For Regular 8 projection, snap the lever to the left. The indicator shows "R" this time. All film type selecting mechanism is operated by finger-tip lever shift. If the lever is not set properly, serious damage to the film will result.

NOTE: Before you shift the lever, be sure that the motor switch is in off position marked "O" and that no film is loaded. If it is in "FWD" or "REV" position, the shift will not function.

### ● E.S.S. (Elmo Synchro Sound) Switches

In case of silent projection, the E.S.S. switches on the back of the projector should be set at positions 1 and 4. If they are set at other positions than 1 and 4, the projector does not operate for silent projection. (Refer to page 7.)

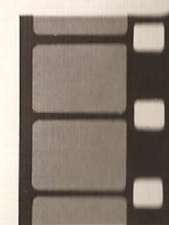
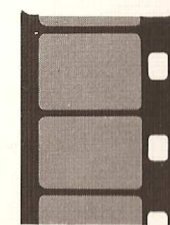
[This explanation is applicable only for the Model GP DELUXE.]



Super-8 film

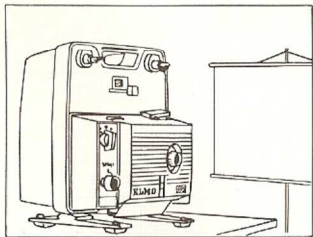


Ordinary film

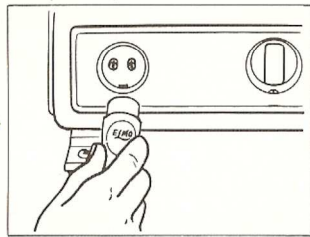


## Condensed Operating Instructions

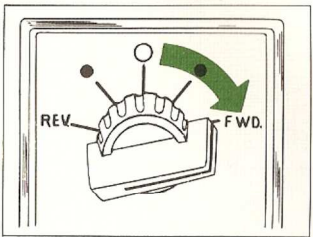
This is a condensed check list only. For troublefree operation and best projection results, be sure to read this manual carefully before operating your projector.



1. Place the projector on a stand or table at a suitable distance from the screen.

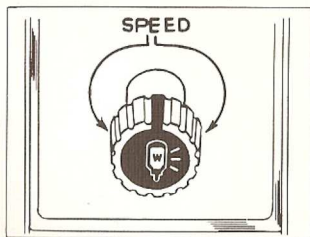


2. Plug in the power cord.

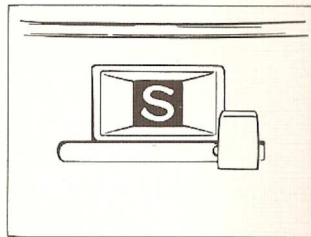


7. Turn the motor switch to FWD to run the projector.

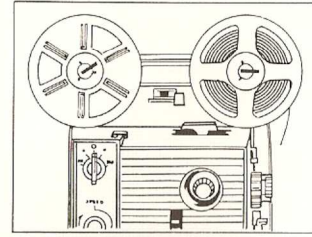
8. Pull the lamp switch/speed control knob to be ON'.  
(The lamp is still not lit at this stage.)



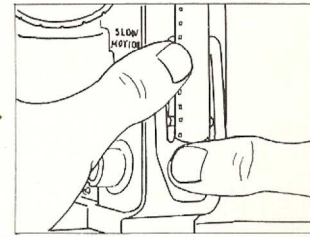
9. Insert the end of the film leader into the threading slot. When the film threads automatically to the takeup reel, the projection lamp will turn on.



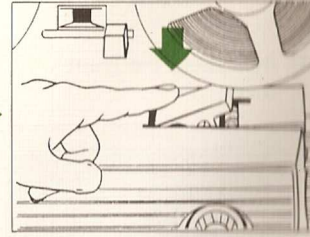
3. Set the film type selecting lever at proper position in accordance with the type of your film.



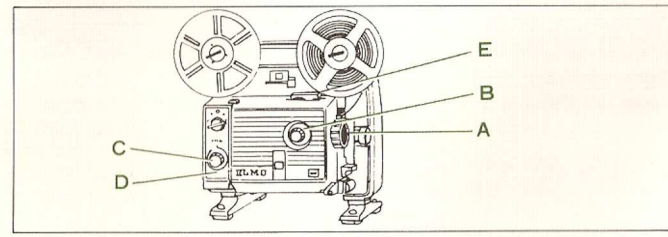
4. Attach the Auto Reel to the rear takeup spindle and the feed reel to the front spindle.



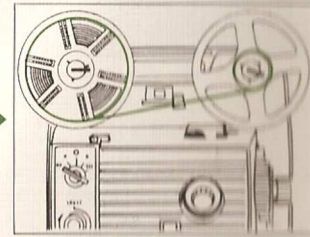
6. Depress the threading lever to set automatic threading system.



5. Trim the end of film leader with film cutter to insure smooth, automatic threading.



10. Once projection begins, adjust the following, if necessary:  
A. Image size on the screen.  
B. Focus  
C. Projection speed  
D. Framing  
E. Picture steadiness. If it is jumpy, lightly press the loop restorer (threading lever) to make it steady.



11. When the complete roll of film has been projected, rewind the film.



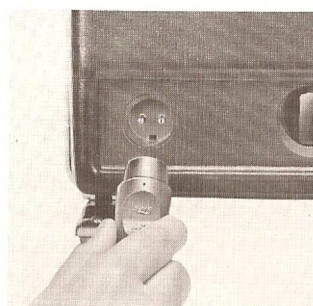
## Preparing for projection

### 1. Removing the front cover

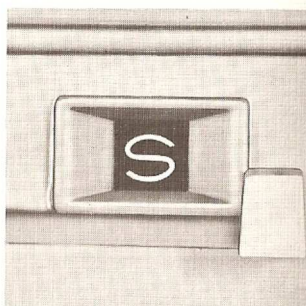


1. Hold both sides of the front cover of the projector and pull outward as shown in the picture.
2. Plug the power cord into the socket on back of the projector (making certain that the red dot on the plug is indexed below the red dot above the socket), and the other end into a convenient AC outlet.

### 2. Connecting cord



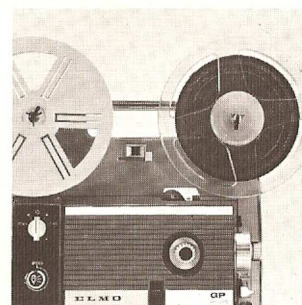
### 3. Positioning the film type selecting lever:



3. Before doing anything else, adjust the projector to accept the type of film by snapping the film type selecting lever either to the right or to the left. When the film type indicator shows "S", Super 8 or Single 8 film is acceptable. When "R" is shown, Regular 8 (Double 8) film is acceptable.

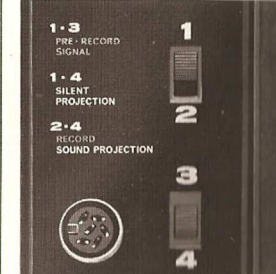
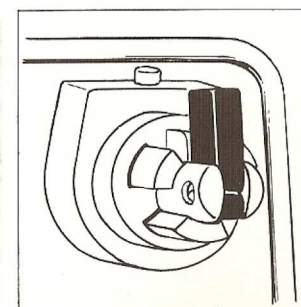
**NOTE:** Before you shift the lever, be sure that the motor switch is in off position marked "O" and that no film is loaded. The lever does not work when the motor switch is in FWD or REV position.

### 4. Mounting reels



4. Remove the takeup reel from inside the front cover and put it on the rear spindle of the projector; lock it into place by flipping down the plastic keeper.

Put the feed reel on the front spindle in the same manner. The feed reel spindle will accommodate both the large-bore Super 8 film reel and the small-bore reel of Regular 8 mm film. (Half inch bore of the Super 8 reel fits over the trisected portion of the spindle shaft. When a regular reel is put on the spindle, the trisected shaft is pushed back, allowing the bore of the reel to fit the smaller diameter of the basic shaft. Because of this arrangement, the feed reel spindle accepts any type of reel with a capacity of up to 400 feet of film.)

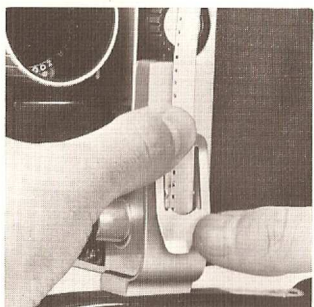


#### E.S.S. (Elmo Synchro Sound) Switches

In case of sound projection, the E.S.S. switches on the back of the projector should be set at positions 1 and 3. If they are set at other positions than 1 and 3, the projector does not operate for silent projection. When synchronizing a tape recorder with the projector using the Elmo Synchro Sound unit, the switches must be set at positions 1 and 3 for pre-record signal or 2 and 4 for recording or sound projection. (Refer to the Instruction Booklet for details of the Elmo Synchro Sound unit.)  
(This explanation is applicable only for the Model GP DELUXE.)

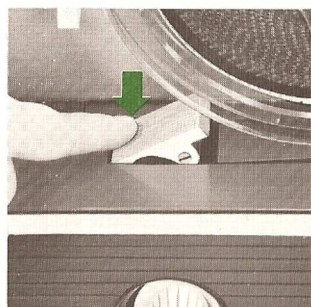
## Threading the film

### 1. Trim the film end

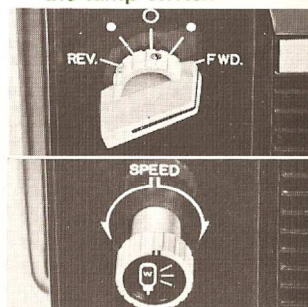


1. To insure smooth, automatic threading, the end of leader should be trimmed with the film cutter.
2. Depress the threading lever until it seats all the way. (Then the threading slot is illuminated.)

### 2. Depress the threading lever

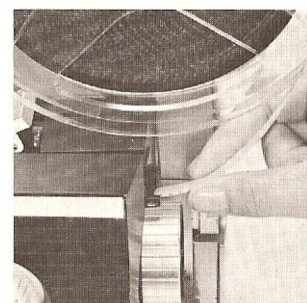


### 3. Turn the motor switch to FWD and pull out the lamp switch



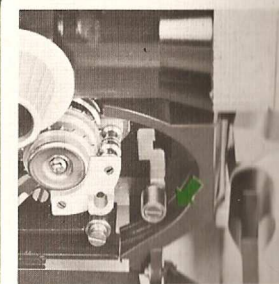
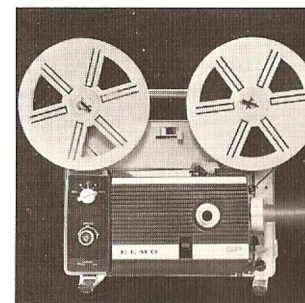
3. The lamp switch also serves as the speed control knob. The speed control knob always works regardless of the position of lamp switch. To make the projection speed faster, turn the knob clockwise. Adjust the speed so that the pictures may become steady.

### 4. Insert the film end



4. Insert the end of film into the threading slot marked by the arrow. If the film end is extremely curled, it has to be straightened before inserting.
5. The film will now be threaded automatically and carried to the takeup reel, at which time the projection lamp will automatically turn on and the threading lever snaps back to its position. Projection starts for the first time at this point. (When the lamp fails to turn on even after the film has been wound on the takeup reel, turn the takeup reel clockwise fast with hand.)

### 5. Start projection



### Threading lever

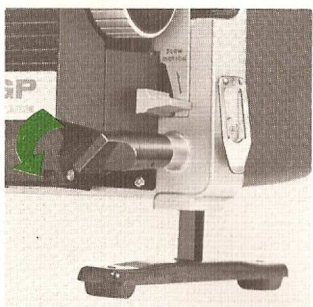
When the threading lever is once set, the projection lamp will not turn on even if the lamp switch is pulled. To release the automatic threading system, open the front housing by pulling the upper part outward and push the roller in the direction of the arrow as illustrated in the picture.



## Projection

When the projected image appears on the screen, following points has to be checked:

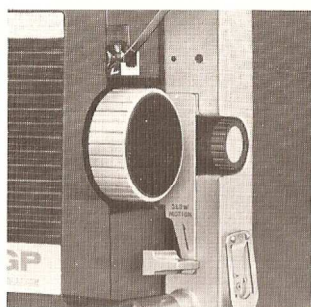
### A. Image alignment



A. If the projected image is not centered vertically on the screen, turn the elevation control knob counterclockwise and move the front of the projector up or down until it is properly aligned. Then tighten the knob.

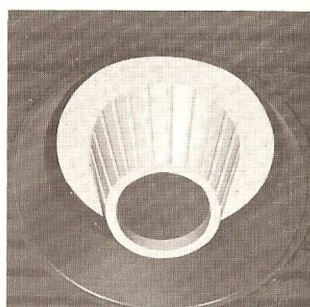
B. If your projector is equipped with the 15mm – 25mm zoom lens, you may also vary the size of the image on the screen without

### B. Image size



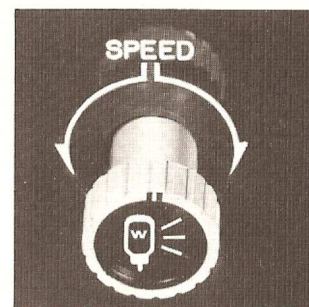
C. Is the image sharp? If not, bring it into focus by turning the focusing knob.

### C. Focusing



changing the projector-to-screen distance. Simply rotate the knurled ring of the lens in either direction until the image size is where you want it. Then re-focus the lens with the focusing knob.

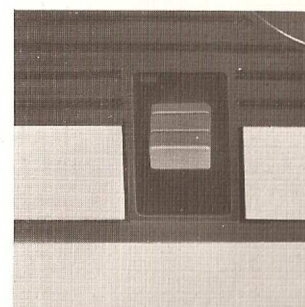
### D. Image stability



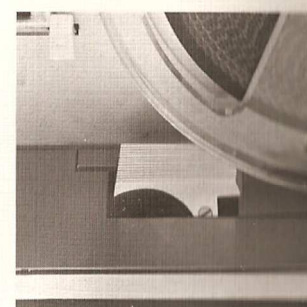
D. Does the picture flicker? If it does, adjust the speed control knob until the image becomes steady.

E. Is the entire frame properly projected, without showing a frame line? If not, move the framing lever up or down to correct.

### E. Framing



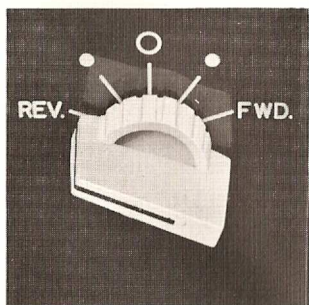
### F. Jumpy image



F. If the film loop is lost during projection due to improper splices or for some reason, it can instantly be restored by lightly depressing the loop restorer (threading lever). Loss of loop results in "jumpy", improperly framed picture and noisy projection.

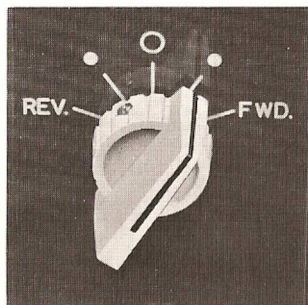
## Various projection features

### A. Reverse projection



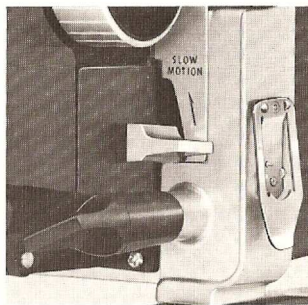
A. When the motor switch is turned to REV, the reverse projection is available.

### B. Single frame still projection



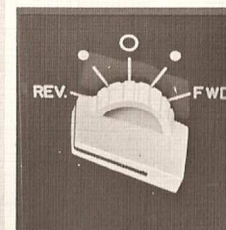
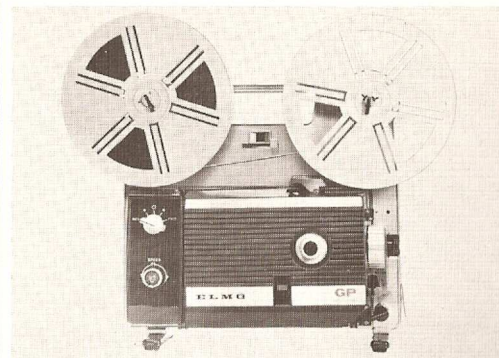
B. During projection, you may wish to stop the movie to show a single frame. This may be done by turning the motor switch to still position as illustrated in the picture. Sometimes the film will stop in the middle of a frame, or when the aperture is closed. When this happens, pull out the threading knob and turn it until the full frame is projected on the screen.

### C. Slow motion projection



C. Model GP with Slow Motion has a slow motion device which enables you to project your films at flicker-free speed of 6-8 frames per second. To switch to slow motion, simply move the red lever up. To change to standard operation, move the red lever down. To change to reverse slow motion, move the red lever up, and turn the motor switch to REV.

## When projection is completed



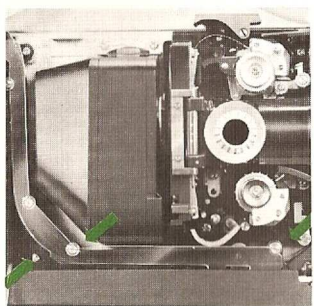
After the film has been projected and completely wound on the takeup reel, turn off the lamp and the motor, in that order.

To wind the film back on the feed reel:

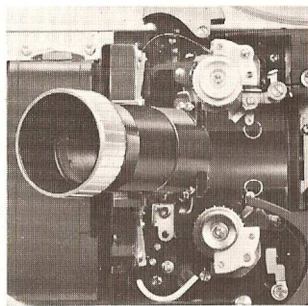
1. Insert the end of the film into the slot of feed reel.
2. Turn the speed control knob to the high position and the motor switch to REV. The film will be rewound at high speed.



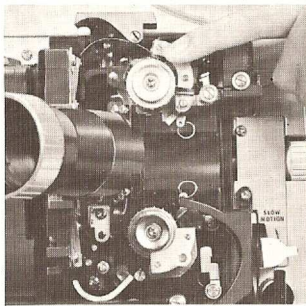
## Unloading the film during projection



1. Open the front housing by pulling the upper part out.  
Detach the transparent cover. (When re-attaching it, adjust the positions indicated by the arrows in the picture and fix it into the projector.)



2. Holding the top of lens barrel lightly, swing open the lens holder as shown in the picture.
3. Open the sprocket shoe, as in the picture, to unload the film.



## Trouble shooting

### Projector does not operate:

- Check: If the power cord socket is not firmly fixed.  
If the voltage selector is not firmly fixed.  
If the motor belt or takeup belt behind the rear cover is not broken.  
(To open the rear cover, detach the power cord and unscrew the rear cover attaching screw.)  
If the E.S.S. switches are set at positions 1 and 4, (if your projector has Sound Synchronization System.)

### Projection lamp does not turn on:

- Check: If the projection lamp properly seated.  
If the threading lever is not set.

### Film is not taken up automatically:

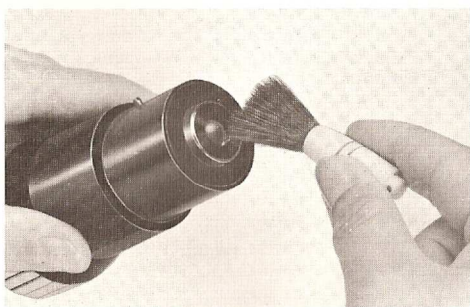
- Check: If the film type selecting lever is properly set.  
If the threading lever is set.  
If the end of film is properly cut.  
If the perforations of the film end are not damaged.  
If the film is not curled.

### Image-jitter and unusual noise:

- Check: If loops are not lost. (Depress loop restorer.)  
If the film properly spliced.  
If perforations are not damaged.

## Maintenance of the projector

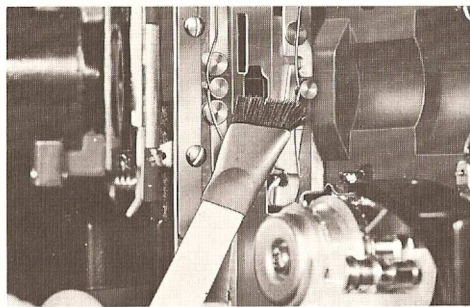
### A. Projection lens



A. Turn the focusing knob fully clockwise and pull out the projection lens. Wipe both the front and rear faces gently with a camel hair brush or soft cloth. Do not blow the lens or touch with naked fingers.

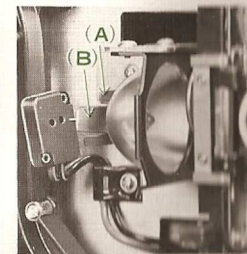
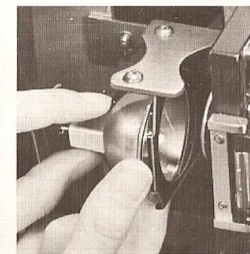
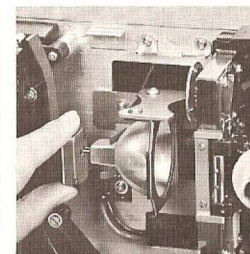
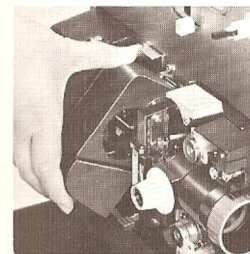
B. The film gate, which is in continuous contact with the film, is precisely machined to prevent damage to the film. When film dust or other matter adheres to the gate, it may scratch or damage the film. From time to time, therefore, especially after heavy use, the film gate and surrounding area should be cleaned with a small brush provided. To clean the film path, pull out the lens holder to open the film gate, and turn the threading knob until the film sending claws, if they are visible, are recessed. The film sending claws are of two tiny pins. Then clean the film path with the brush.

### B. Pressure plate/Aperture plate



## Replacing the projection lamp

Detach the power cord first.

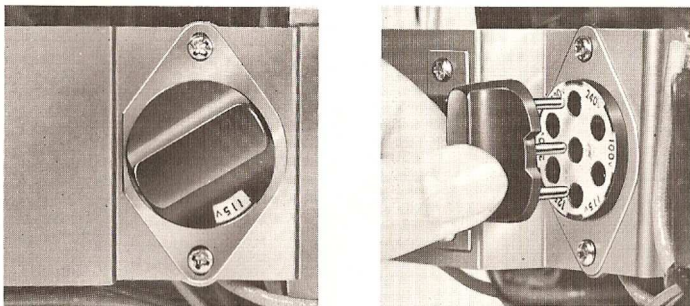


1. Open the front housing, and pull out the lamp house by lifting the bottom.
2. Unplug the lamp from the socket to left.
3. Hold the lamp as shown in the picture, ensuring the lamp is cooled, to remove.
4. To install a replacement lamp, place the square base (B) of lamp into the hollow (A) and push the reflector into the metal rim. Line up the pins on the replacement lamp with the holes in the socket and push the lamp into position. Do not touch the bulb itself. Push on the rim of the reflector only.



## Adjusting the voltage

Be sure to disconnect the power cord first.

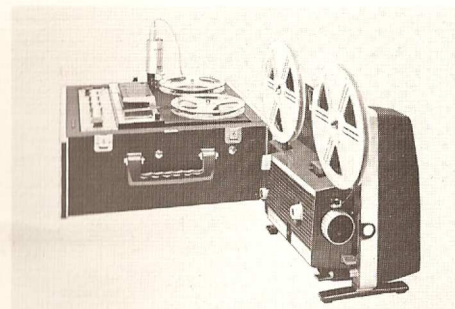


The Elmo GP projector can work over the voltage range 100 to 240 (or 220 to 240) volts A.C. The projector must suit the supply voltage, otherwise the lamp life will be shortened or there will be loss of illumination.

Remove the rear cover. Pull off the voltage selector and resume the selector in position where your supply voltage appears in the opening.

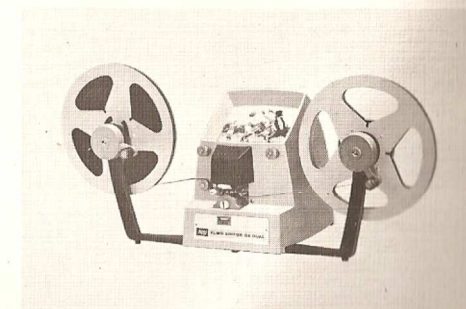
Note: For certain countries the GP projector is delivered with a single voltage transformer, and in this case, the instruction on this page is not applicable.

## Elmo Synchro Sound A-1



To enjoy talkie projection, use the exclusive Elmo Synchro Sound, which synchronizes GP DELUXE projector with tape recorder.

## Elmo Editor SE Dual



With the Elmo SE Dual, all of Super 8, Single 8 and Regular 8 films can be edited. It has a large and bright screen, a rapid rewinding system and other outstanding features for easier editing.