Film-Tech

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These manuals are designed to facilitate the exchange of information related to cinema projection and film handling, with no warranties nor obligations from the authors, for qualified field service engineers.

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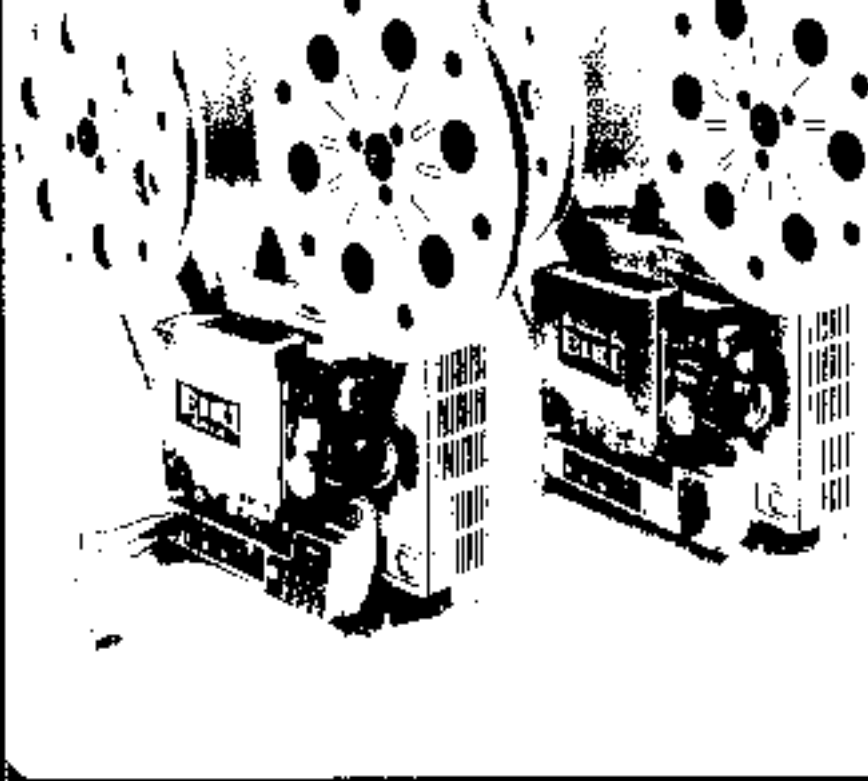


OWNER'S INSTRUCTION MANUAL

16mm Sound Projector

SLIM LINE SELF THREADER

SNT/ENT SERIES

EIKI

When the show must go on.

SNT-0, -1, -2, -3/ENT-0, -1, -2, -3

Simple Operation
Easy Maintenance
Trouble-Free Use

This Operator's Manual is easy to read, informative and helpful. Please read it carefully. Before you try it your way, please try it our way.

CONTENTS

IMPORTANT SAFEGUARDS

When using your EIKI 16mm projector, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions.
2. Close supervision is necessary when any equipment is used by or near children. Do not leave projector unattended while in use.
3. Care must be taken as burns can occur when changing lamp. Use lamp ejection lever provided to avoid possibility of burns from a hot lamp.
4. Do not operate projector with a damaged cord or if projector has been dropped or damaged — until its has been examined by a qualified service technician.
5. Do not let the cord hang over edge of the 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 projector may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
7. Always unplug projector from electrical outlet when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
8. Let projector cool completely before putting away. Return cord to cord storage space provided when storing projector.
9. To protect against electrical shock hazards, do not operate this projector in the rain or when wet.

– to be continued –

IMPORTANT SAFEGUARDS (cont'd)

10. To avoid electric shock hazard, do not disassemble this projector, but refer to a qualified service technician when service or repair work is required. Improper repairs or reassembly can cause electric shock hazard when the projector is used subsequently.
11. Do not open lamphouse cover when projector motor is running.
12. Observe the caution plate by rear cover latch "DISCONNECT POWER SUPPLY BEFORE OPENING".
13. Do not look directly at an operating lamp with unprotected eyes.
14. Observe the caution plate inside of lamphousing. "DISCONNECT POWER BEFORE REPLACING LAMPS".

SAVE THESE INSTRUCTIONS

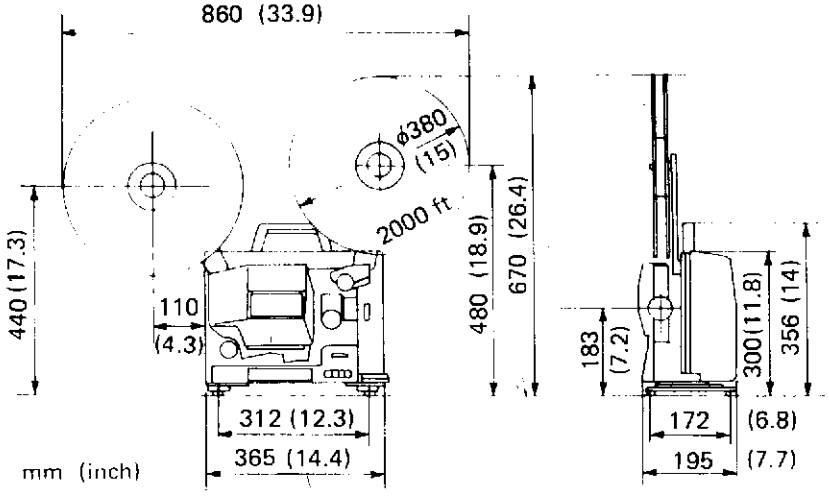
1. SPECIFICATIONS

Power Requirement	:	Model available from 100V to 240V AC 50 or 60 Hz. Dual Voltage (110/220V or 120/240V) also available
Power Consumption	:	430 to 470W
Projection Lamp	:	ELC 24V 250W Halogen Lamp
High-Low Lamp Switch	:	All Models
Exciter Lamp	:	Type BRK/4V 0.75A
Projection Lens	:	50mm (2") F1.2, 6-element, coated, 160 lines per mm (center) resolution standard
Anamorphic Lens Bracket	:	Option
Film Speed	:	24FPS sound speed standard (18FPS silent speed optional)
Shutter	:	2 or 3 blade optional
Reel Capacity	:	2000ft (600m) standard reel supplied with projector. Max. up to 2400ft (720m)
Film Threading	:	Automatic, Self-Threading
Function Control	:	SNT-Series . . . Rotary Switch ENT-Series. . . Electronic Push Button Switch
Still Frame or Pause	:	All Models
Inching Knob	:	All Models
Loop Restorer	:	Automatic
Film Guard Switch	:	ENT-Series only
Auto-Stop Switch at Film End	:	ENT-Series only both in forward and reverse projection
Auto-Stop Switch at End of Self-Threading	:	ENT-Series only
Remote Control Connector	:	ENT Series only (hand held remote control optional)
Amplifier	:	All IC Solid state module, 25W RMS into 8 ohm load, AUX Line Out 600 ohm unbalanced
Frequency Response	:	Opt. 50 - 7000 Hz Mag. 50 - 12000 Hz
P.A. System	:	All Models
Microphone Input	:	Impedance 600 ohm or higher, Input Level 10 mv max. (Microphone supplied with type -3 model only)

Tone Controls	:	Individual Bass and Treble controls
Rear Cover Speaker	:	10 x 15 cm (4 x 6") 8 ohm on all models
Front Cover Speakers	:	12.5 cm (5") 2 pcs. 16 ohm 25W each on type -1, -2, -3 models
Wow & Flutter	:	Less than 0.2 % WRMS
Elevation	:	13° max.
Operating Temperature & Humidity	:	+5°C to +40°C, 20% to 90% RH
Weight	:	13.8 to 15.2 Kgs (30.42 to 33.51 Lbs)
Dimensions	:	365 (W) x 300 (H) x 195 (D) mm (without front cover) 14.4 (W) x 11.8 (H) x 7.7 (D) inches (without front cover)

	ENT-0	ENT-1	ENT-2	ENT-3	SNT-0	SNT-1	SNT-2	SNT-3
OPTICAL SOUND	•	•	•	•	•	•	•	•
MAGNETIC SOUND			•	•			•	•
MAGNETIC RECORDING				•				•
REAR COVER SPEAKER	•	•	•	•	•	•	•	•
FRONT COVER SEPEAKERS		•	•	•		•	•	•
LAMP TYPE	ELC 24V 250W	ELC 24V 250W	ELC 24V 250W	ELC 24V 250W	ELC 24V 250W	ELC 24V 250W	ELC 24V 250W	ELC 24V 250W
HIGH LOW LAMP SWITCH	•	•	•	•	•	•	•	•
FUNCTION CONTROL	ELECTRONIC PUSH BUTTON SWITCH				ROTARY SWITCH			
AMP. POWER	RMS 25W	RMS 25W	RMS 25W	RMS 25W	RMS 25W	RMS 25W	RMS 25W	RMS 25W
FILM GUARD SWITCH	•	•	•	•				
AUTO-STOP SW AT FMIL END IN FWD & RVS	•	•	•	•				
REMOTE CONNECTOR	•	•	•	•				
WEIGHT LBS	31.52	33.51			30.42	32.17		
WEIGHT KGS	14.3	15.2			13.8	14.6		
DIMENSIONS INCHES	14.4 (W) 11.8 (H) 8.1 (D)	14.4 (W) 11.8 (H) 9.3 (D)			14.4 (W) 11.8 (H) 8.1 (D)	14.4 (W) 11.8 (H) 9.3 (D)		
MM	365 (W) 300 (H) 206 (D)	365 (W) 300 (H) 235 (D)			365 (W) 300 (H) 206 (D)	365 (W) 300 (H) 235 (D)		

* Measured with front cover on


860 (33.9)
ø380
(15)
2000 ft
440 (17.3)
110
(4.3)
480 (18.9)
670 (26.4)
183
(7.2)
300(11.8)
356 (14)
312 (12.3)
365 (14.4)
172
(6.8)
195
(7.7)
mm (inch)

2. MAIN PARTS OF THE PROJECTOR(FRONT)

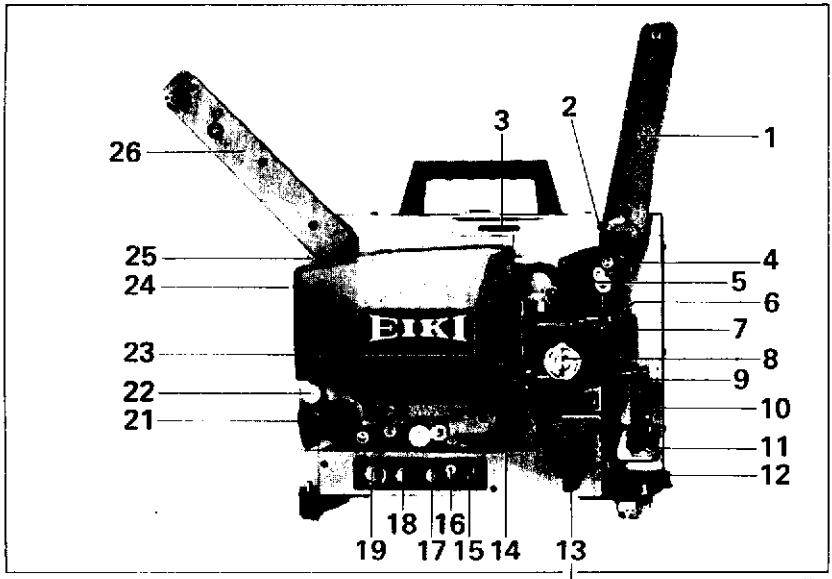


Fig. #1
(SNT-2)

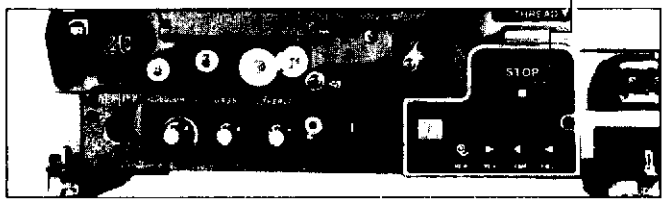


Fig. #2
(ENT-Series)

1. Supply Arm
2. Arm Lock/Release Button
3. STILL/RUN Lever
4. Film Channel
5. #1 Sprocket
6. Projection Lens
7. Inching Knob
8. Focus Knob
9. Self-Thread Control Lever
10. Anamorphic Lens Bracket (Option)
11. Film Trimmer
12. Elevator Knob
13. Function Switch Rotary (SNT) Push Button (ENT)
14. Loop Restorer Roller
15. OPT/MAG Selection Switch
16. MIC Jack
17. Treble Control
18. Bass Control
19. Amp. Switch and Volume Contol
20. Remote Control Connector (ENT only)
21. #2 Sprocket
22. Take-up Tension Roller
23. Lamp House Door
24. Lamp House Door Lock Screw
25. Arm Lock/Release Button
26. Take-Up Arm

2. MAIN PARTS OF THE PROJECTOR(REAR)

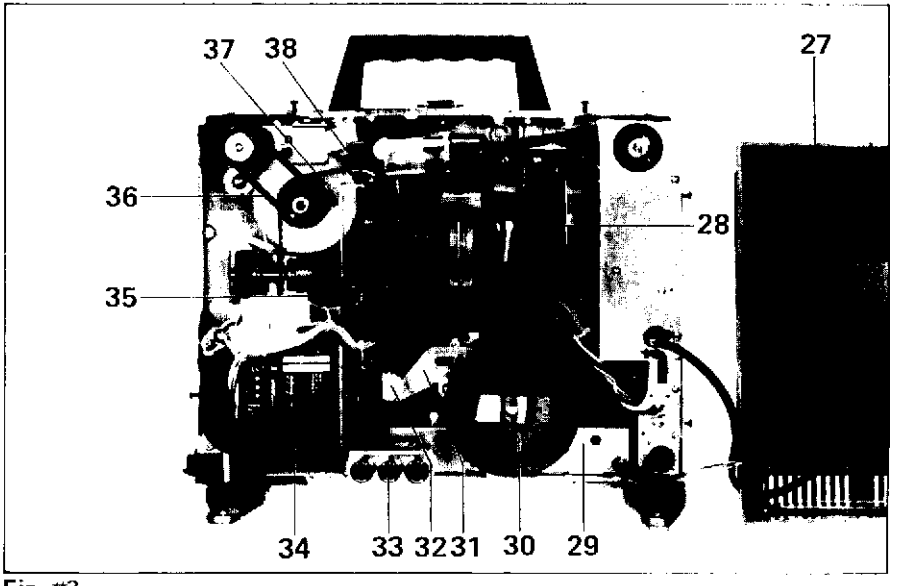


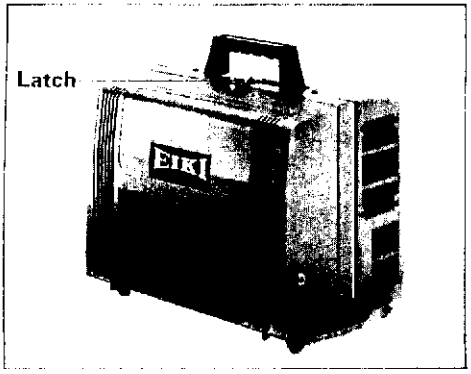
Fig. #3

Fig. #4 (ENT-Series)

27. Rear Cover
28. Motor/Fan Module
29. Amplifier Module
30. Flywheel
31. Film Guide Interlocking Bracket
32. Loop Restorer Gear
33. Fuse & Fuse Holder Bracket
34. Transformer Module
35. Cam Tank Module
36. Reverse Belt
37. Main Drive Belt
38. Motor Belt
39. Control P.C. Board (ENT only)

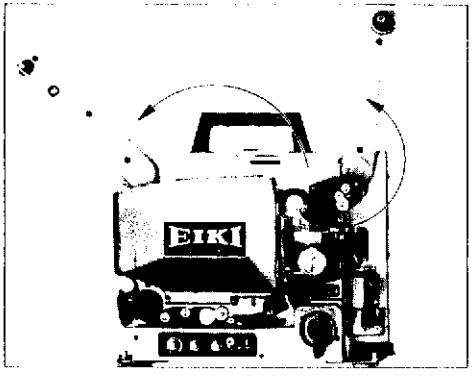
3. SETTING UP THE PROJECTOR

1. Lift latch to remove front cover.



(Fig. #5)

2. Raise both reel arms until they snap in place.



(Fig. #6)

3. Set function control switch to STOP position.

ENT-MODELS

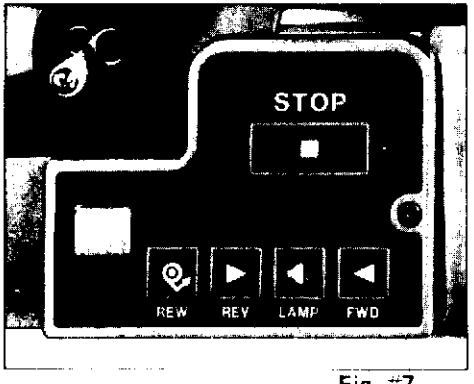


Fig. #7

SNT-MODELS

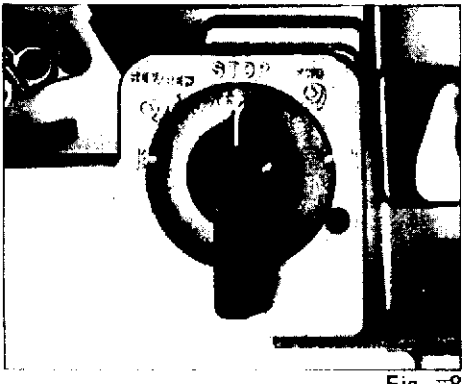


Fig. #8

4. Remove power cord from the storage compartment and connect to electrical outlet.

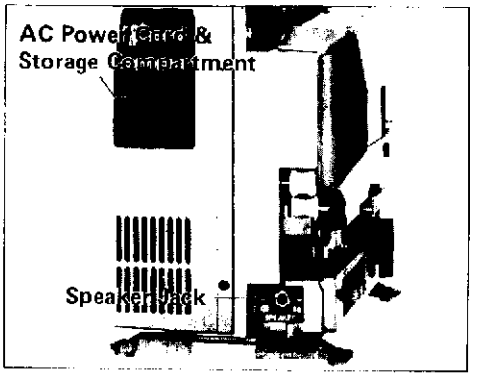


Fig. #9

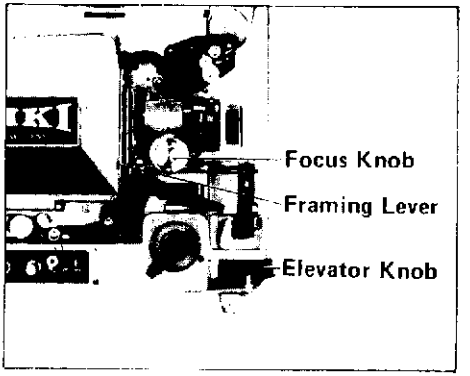


Fig. #10

5. Set function control switch to Forward and Lamp.
6. Position projector for the appropriate size image as described. Adjust elevator knob to achieve the required image height. (See chart below for appropriate lens, distance and screen size.) (Fig. #10)

SCREEN SIZE CHARTS IN METERS

Distance / Lens		3m	5	10	15	20	25	30	40
38mm	H	0.56	0.94	1.89	2.84	3.79	4.74	5.69	7.58
	W	0.76	1.26	2.53	2.80	5.07	6.34	7.61	10.15
50	H	0.43	0.72	1.44	2.16	2.88	3.60	4.32	5.76
	W	0.57	0.96	1.93	2.89	3.86	4.82	5.79	7.72
65	H	0.33	0.55	1.10	1.66	2.21	2.77	3.32	4.43
	W	0.44	0.74	1.84	2.22	2.96	3.71	4.45	5.93
76	H	0.28	0.47	0.94	1.42	1.89	2.37	2.84	3.79
	W	0.38	0.63	1.26	1.90	2.53	3.17	3.80	5.07
100	H	0.21	0.36	0.72	1.08	1.44	1.80	2.16	2.88
	W	0.28	0.48	0.96	1.44	1.93	2.41	2.89	3.86

(50 mm / 2.0" : Standard)

SCREEN SIZE CHARTS IN INCHES

Distance / Lens		8'	10'	12'	15'	20'	25'	30'	35'	40'	45'	50'	60'	75'	100'
1"	H	2'2"	2'9"	3'4"	4'2"	5'7"	6'11"	8'4"	9'9"						
	W	2'11"	3'8"	4'5"	5'7"	7'5"	9'4"	11'3"	13'1"						
1.5"	H	1'5"	1'10"	2'2"	2'9"	3'8"	4'8"	5'7"	6'6"	7'5"	8'4"	9'4"			
	W	1'11"	2'5"	2'11"	3'8"	4'11"	6'2"	7'6"	8'9"	10'0"	11'3"	12'5"			
2.0"	H		1'4"	1'8"	2'1"	2'9"	3'5"	4'2"	4'10"	5'7"	6'3"	6'11"	8'4"	10'5"	13'11"
	W		1'10"	2'2"	2'9"	3'8"	4'8"	5'7"	6'6"	7'5"	8'5"	9'4"	11'3"	14'0"	18'9"
3.0	H						2'3"	2'9"	3'3"	3'8"	4'2"	4'7"	5'7"	6'11"	9'3"
	W						3'1"	3'8"	4'4"	4'11"	5'7"	6'2"	7'5"	9'4"	12'6"
4.0	H						1'8"	2'1"	2'5"	2'9"	3'1"	3'5"	4'2"	5'2"	6'11"
	W						2'3"	2'9"	3'3"	3'8"	4'2"	4'8"	5'7"	7'0"	9'4"

7. Adjust focus for clean, sharply illuminated screen. (Fig. #10)

8. When desired projection position and screen image size has been achieved, stop projector.

9. For larger groups, the extension speakers built-in the front cover (with -1, -2, -3 type only) may be placed near the screen and plugged into the jack marked "SPEAKER 8Ω)))" located on the left of the projector. (Fig. #9, #11)
   The internal speaker built-in the rear cover (with all types) is then automatically disabled.

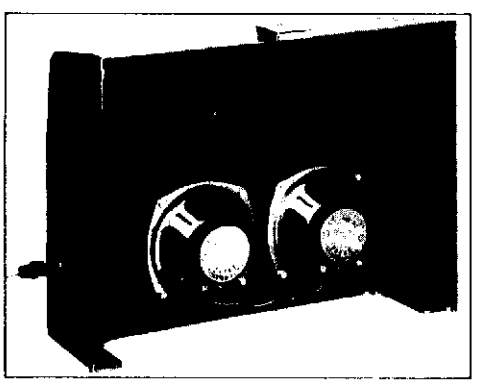


Fig. #11

10. For additional sound reinforcement the projector may also be connected to an external amplifier via the low level auxiliary line output. The 600 ohm (unbalanced) line is available at the speaker jack when using a 3 conductor (stereo type) ¼" phone plug wired as shown.

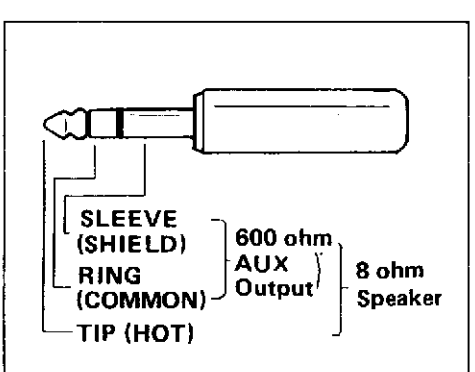


Fig. #12

4. THREADING INSTRUCTIONS: SNT-Series

1. Attach film to supply arm (front) spindle with the film spooling off in a clockwise direction and the sprocket holes on the outside edge.
2. Trim a clean end on the film (Fig. #13)
3. Set the function control to Forward, and the motor runs. (Fig. #14)

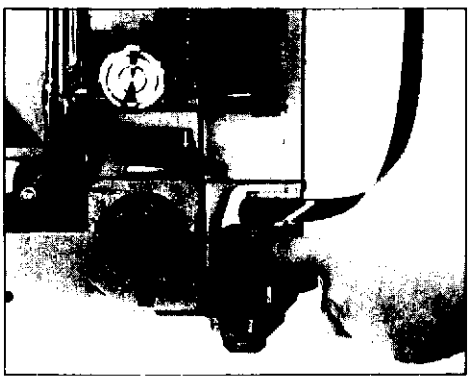


Fig. #13

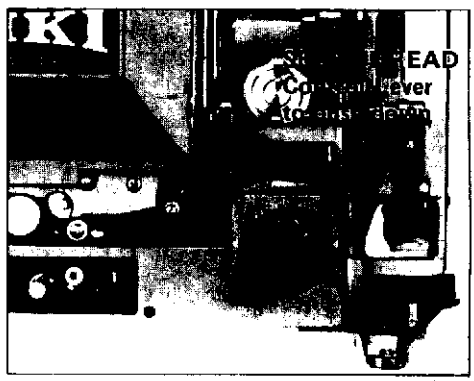


Fig. #14

4. Push the Self-Thread lever down until it locks in position. (Fig. #14)
5. Insert the end of the film in between the upper rollers as designated by arrows (Fig. #15)
   The film is now threaded automatically in the film path.

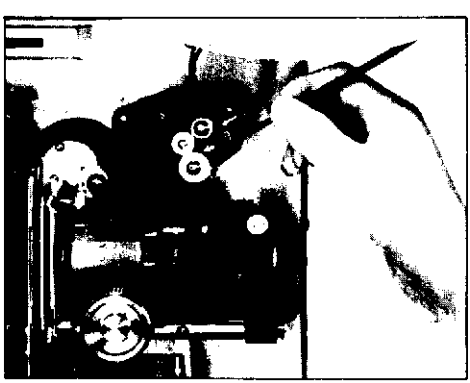


Fig. #15

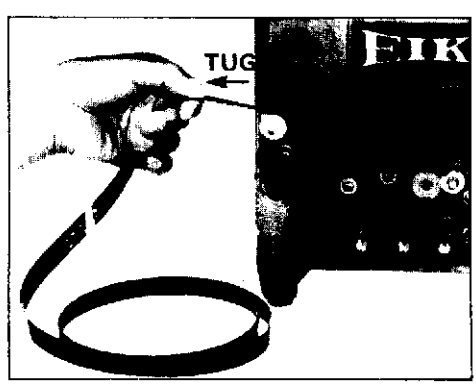


Fig. #16

6. When the film exits at the rear, approximately 70 cm (2 feet), return the function switch to STOP.
7. Give the film leader a slight tug to pull the take-up tension roller and to release the self-thread mechanism. (Fig. #16)
8. Attach the film to the take-up reel (rear) and wind up the slack in a clockwise direction.

5. THREADING INSTRUCTIONS: ENT-Series

1. Attach film to supply arm (front) spindle with the film spooling off in a clockwise direction and the sprocket holes on the outside edge.
2. Trim a clean end on the film. (Fig. #13)
3. Set the function control switch to Forward, and the motor runs. (Fig. #17)

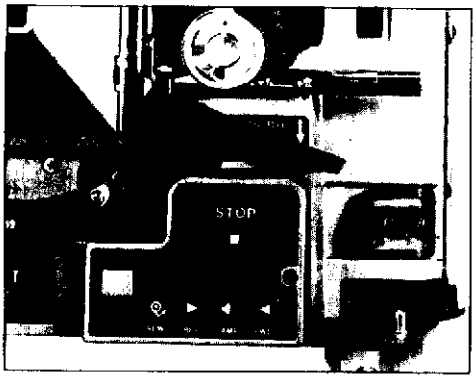


Fig. #17

4. Push the Self-Thread lever down until it locks in position. (Fig. #17)
5. Insert the end of the film in between the upper rollers as designated by arrows. (Fig. #15)
   The film is now threaded automatically in the film path.
6. When approximately 70 cm (2 feet) of the film exits at the take-up tension roller, the projector will automatically stop.
   Apply a gentle tug to the film to release the self-thread mechanism. (Fig. #16)
7. Attach the film to the take-up reel (rear) and wind up the slack in a clockwise direction.

6. MANUAL THREADING INSTRUCTIONS: SNT & ENT-Series

1. Attach film to supply arm (front) spindle with about 3 ft (1 m) of film spooling off in a clockwise direction, and then sprocket holes on the outside edge.
2. Following the illustrated threading guide (Fig. #18), open the #1 sprocket shoe and insert the film between the rollers as designated by the orange arrows. (Fig. #19) Seat the film around the lower portion of the sprocket and close the #1 sprocket shoe.

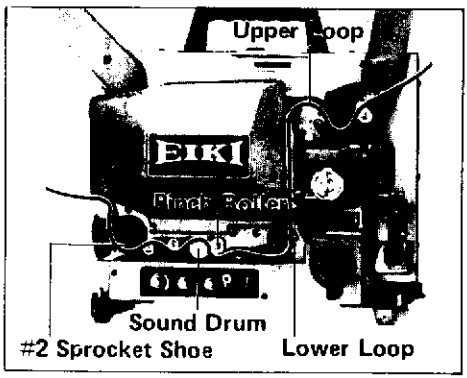


Fig. #18

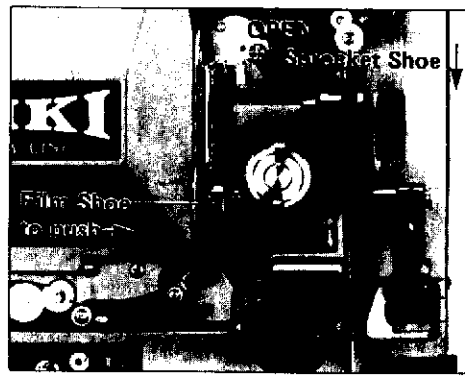


Fig. #19

3. Push the film shoe open until it locks in position, and while forming the upper loop along the upper loop guide, seat the film flat in the aperture and close the film shoe by lightly pushing down the self-thread lever.
4. Form the lower loop around the loop setter, lift the sound drum pinch roller and wrap the film loosely over the sound drum.
5. Continuing to follow the threading path, insert the film under the rear sound drum tension roller and over the next guide roller.
6. Open the rear #2 sprocket shoe and seat the film around the lower portion of the sprocket, and over the take-up tension roller.
7. Attach the film to the take-up reel and wind in a clockwise direction.

7. MANUAL UN-THREADING THE PROJECTOR IN THE MIDDLE OF THE REEL: SNT & ENT-Series

(See Fig. #18)

1. Stop the projector.
2. Starting at the take-up tension roller and #2 sprocket, open the #2 sprocket shoe and carefully lift out the film.
3. Continue in the direction toward the front of the projector, and slide the film out from around the sound drum. Lift up on the sound drum pinch roller and remove the film from around the loop setter roller.
4. Push open the film shoe until it locks in position (Fig. #19) and lift out the film.

   To release the film shoe, lightly push down the self-thread lever.
5. Open the #1 sprocket shoe and remove the film from the #1 sprocket and entrance guide rollers.
6. Manually wind the film reels until all the film slack is taken-up, and the film may now be rewound as usual.

8. PROJECTING

1. Thread film as previously described.
2. Switch function control to "Forward" and then to "Lamp". (Fig. #20, #21)

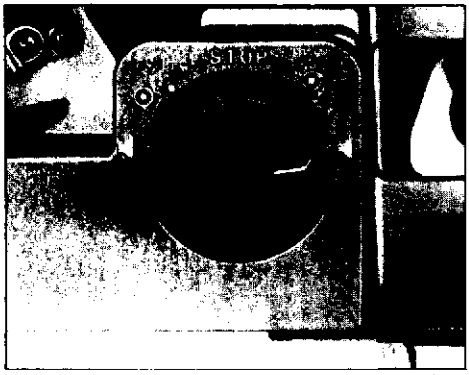
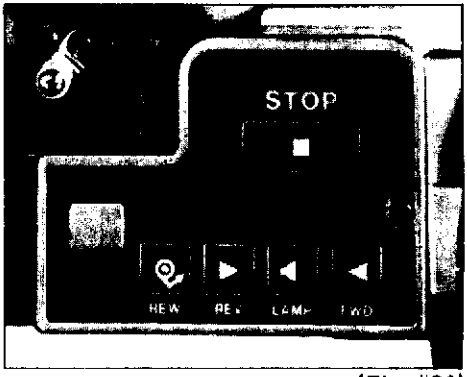
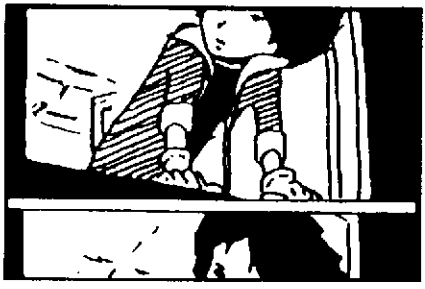


Fig. #20



(Fig. #21)

3. If a frame bar is visible, slightly adjust the framing lever up or down. (Fig. #22, 23)



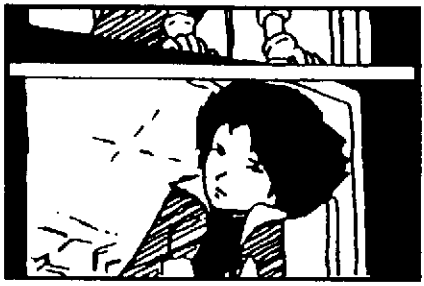


Fig. #22

4. Adjust focus for sharp, crisp picture. (Fig. #23)
5. Wait 2-3 seconds for the first scene to appear, then switch on the Amplifier. (Fig. #24)
6. Adjust the volume and tone controls (Bass and Treble) to the desired level, and the most pleasing sound. (Fig. #24)
7. In the event of the loss of the lower loop, the loop restorer roller rotates and sets the loop automatically without interrupting the show. (Fig. #23)

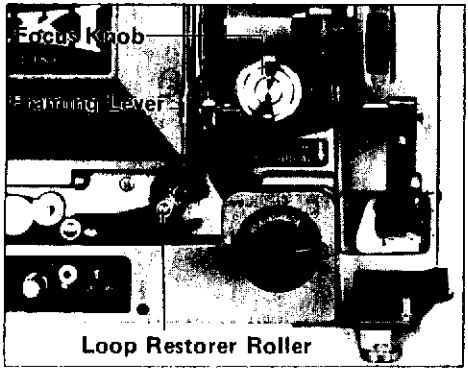


Fig. #23

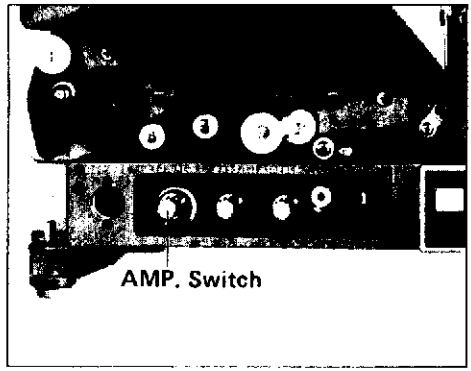


Fig. #24

8. FILM GUARD SWITCH: (ENT Series only)

In the event the upper film loop is completely lost as a result of a previously damaged film, the projector will stop automatically. (Fig. #25) To re-start the show, open the #1 sprocket shoe assy. (Fig. #25), and reform the upper film loop, then close the #1 shoe and push "Forward" and "Lamp".

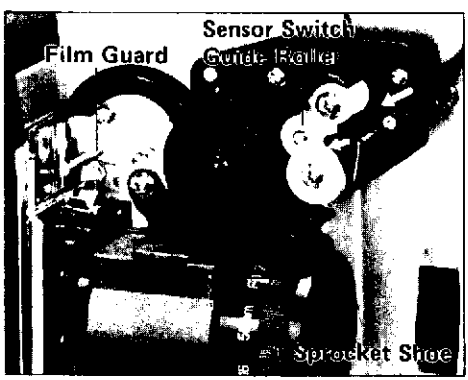


Fig. #25

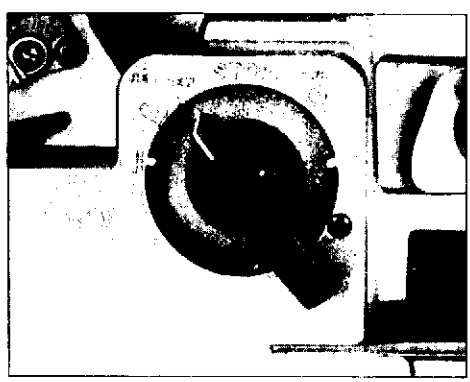


Fig. #26

9. REVERSE PROJECTION :

To project in reverse,

SNT-series: Switch the function control to "Reverse" and then to "Lamp". (Fig. #26, 27)

Note: "Reverse" and "Rewind" is the same position.

A film sensor switch prevents the projector from rewinding with film in path. (Fig. #25)

ENT-series: Push ① "STOP" ② "Reverse" ③ "Lamp", or directly from "Forward" to "Reverse". (Fig. #28)

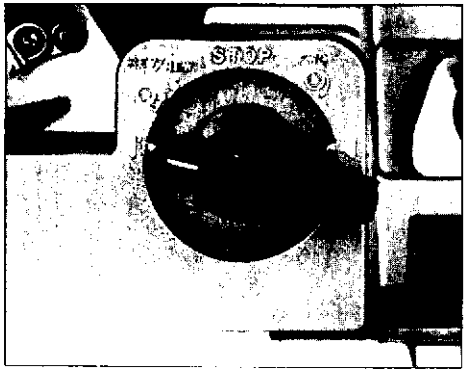


Fig. #27

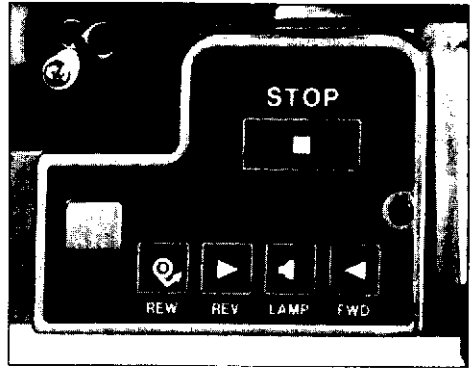


Fig. #28

10. AUTOMATIC STOP AT THE END OF THE FILM: (ENT Series only) When the show is completed and the end of the film passes the last roller in either Forward or Reverse, the projector automatically stops.
11. At the end of the show, return the function switch to "STOP" and turn 'OFF" the amplifier switch when the projector is not in use.

9. REWINDING: SNT-Series

1. Before rewinding, the film must be completely removed from the threading path.
2. Reel-to-Reel Rewind; Bring the tail end of the film from the take-up reel and wind on the supply reel in a counter-clockwise direction.
3. Switch the function control to "Rev/Rew". The projector will not activate the rewind function unless the film is completely out of the threading path. (Fig. #29)
   (The reverse function will operate with film in path, See Sec. 8-9 Note.)

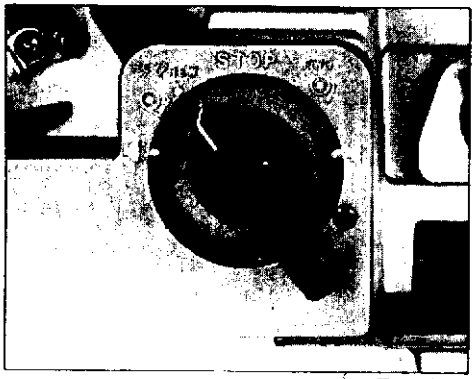


Fig. #29

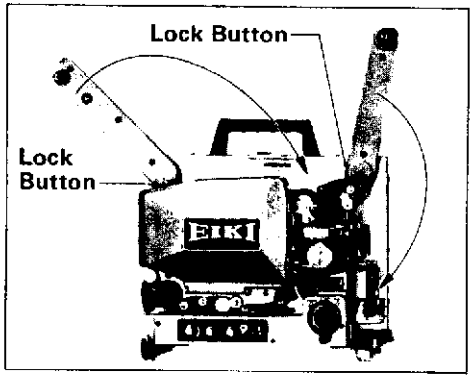


Fig. #30

4. At the completion of the rewind operation, return the function control to "STOP".
5. Remove the film reels and fold down the take-up and supply arms. Push the arm lock buttons to fold arms. (Fig. #30)
6. Unplug the projector from the A.C. outlet and wind up the cord in the storage compartment.
7. Attach the front cover, and slip on the dust cover.

10. REWINDING: ENT-Series

1. Before rewinding, the film must be compeletely removed from the threading path.
2. Reel-to-Reel Rewind; Bring the tail end of the film from the take-up reel and wind on the supply reel in a counter-clockwise direction.
3. Press the "Rewind" function switch. The projector will not activate the rewind function unless the film is completely out of the threading path. (Fig. #28)
4. At the completion of the rewind operation, return the function control to "STOP"
5. Remove the film reels and fold down the taken-up and supply arms. (Fig. #30)
6. Unplug the projector from the A.C. outlet and wind up the cord in the storage compartment.
7. Attach the front cover, and slip on the dust cover.

11. REMOVING THE LENS

1. Turn the focus knob counter-clockwise until the anti-theft lock screw is exposed completely.
2. Unscrew the anti-theft screw in the lens holder. (Fig. #31)

Anti-theft Lock Screw (Fig. #31)

3. The lens can now be removed by turning the focus knob clockwise until the lens is free. (Don't loose the lock screw.)
4. To reinstall the lens, reverse the above procedure.
   Optional lenses can be removed or reinstalled in the same manner.

12. REPLACING LAMPS

DISCONNECT POWER CORD

A. PROJECTION LAMP:

Note the label plate for a correct replacement lamp (ELC 24V 250W, or EJL 24V 200W).

1. To open the lamp house door, remove the lock screw and pull out from the top of the lamp house. (Fig. #32)

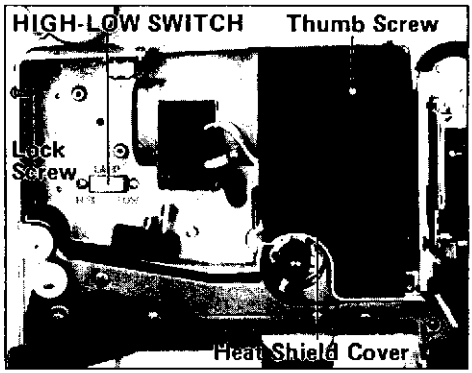
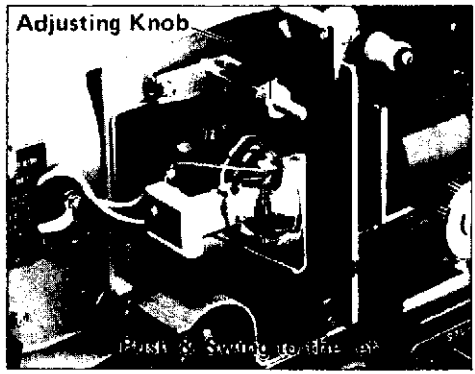


Fig. #32



(Fig. #33)

2. To remove projection lamp, unscrew the black thumb screw and remove the black heat shield by pulling straight out. (Fig. #32)
   (CAUTION : Heat shield may be hot.)
3. Push the lamp ejection lever to the left and the lamp will come out. (Fig. #33)
   (CAUTION : Lamp may be hot.)
4. To install replacement lamp, return the ejection lever to its previous position. Push in the lamp and make sure the lamp snaps into the lamp socket firmly.
5. For maximum, even illumination, it may be necessary to adjust the lamp position to allow for slight variations in lamps. (Fig. #33)
6. Re-install the heat shield with the thumb screw.
7. Close the lamp house door and lock with the screw.

B. EXCITER LAMP (BRK 4V 0.75A):

1. With the lamp house door opened, push in on the exciter lamp and turn counter-clockwise to remove the lamp. (Fig. #34)

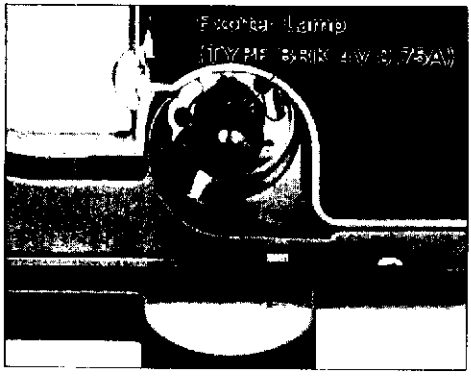


Fig. #34

2. Insert the new exciter lamp with notch on base flange in upper right position, push in and turn clockwise until the lamp snaps in the socket. Clean fingerprints from the lamp.
3. Close the lamp house door and lock it with the screw.

13. HIGH-LOW LAMP SWITCH

SNT/ENT-series projectors are all supplied with the HIGH-LOW lamp selection switch.

The HIGH-LOW Switch is located inside the lamp house. (Fig. #32) To shift the HIGH-LOW switch, open the lamp house door as previously described, and switch to either HIGH or LOW position.

By switching to the LOW position, the lamp will last nearly three times as long as in the HIGH position.

14. STILL FRAME OR PAUSE

SNT/ENT-series projectors feature STILL/RUN control both in forward and reverse. The film may be momentarily stopped for discussion at any time by switching the STILL/RUN control knob to "STILL". (Fig. #35, 36)

In "STILL" a heat filter screen is positioned in front of the lamp reducing the image brightness while protecting the film from excessive lamp heat. Should the shutter stop in front of the image, simply rotate the inching knob until the shutter is out of the picture. (Fig. #35)

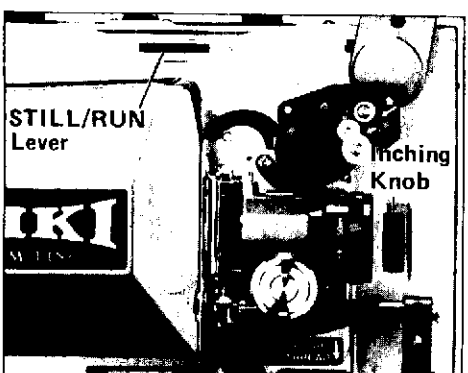


Fig. #35

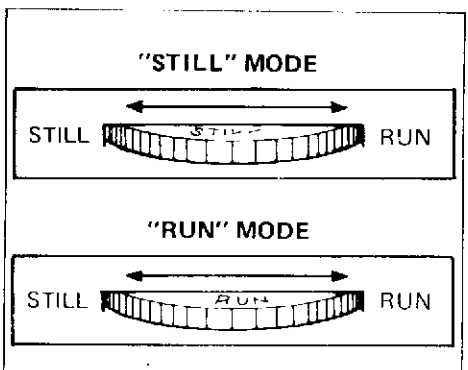


Fig. #36

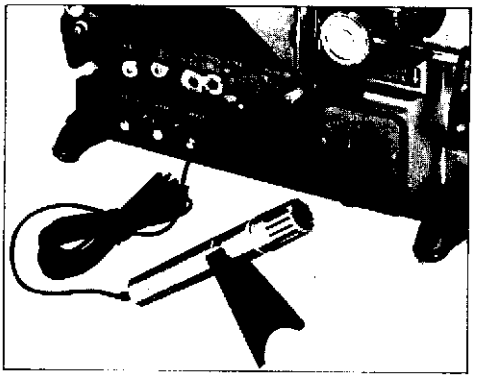
15. SPECIAL APPLICATIONS

A. USING PROJECTOR AS A P.A. SYSTEM

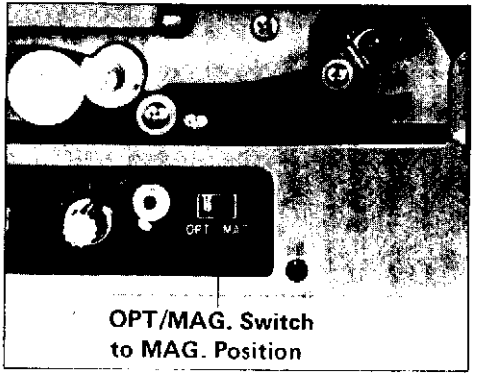
To use the projector as a public address system, simply plug an accessory microphone into the amplifier MIC jack. (Fig. #37)

And turn on the amplifier switch, adjust the volume and tone controls as desired.

Note: It is recommended that the P.A. Microphone be used with the projector plugged into the external speakers, and that the speakers be located away from the protector.



(Fig. #37)



(Fig. #38)

B. MAGNETIC SOUND TRACK PLAYBACK (SNT/ENT-2, -3 TYPE ONLY)

1. To playback a previously recorded magnetic sound track, switch the OPT/MAG switch to the right, "MAG" position. Projector may then be operated as usual. (Fig. #38)

Note: Since the majority of films are optical playback, it is a good idea to return the switch to "OPT" position for the next user.

D. 50 HZ ⇆ 60 HZ CONVERSION

The standard SNT/ENT projector is available as 50 HZ or 60 Hz sound speed (24FPS) operations.

Conversion from 50 Hz to 60 Hz or from 60 Hz to 50 Hz can be accomplished by changing the motor belt position.

DISCONNECT POWER CORD

1. Unscrew 5 screws, and remove the rear cover. (Fig. #41)

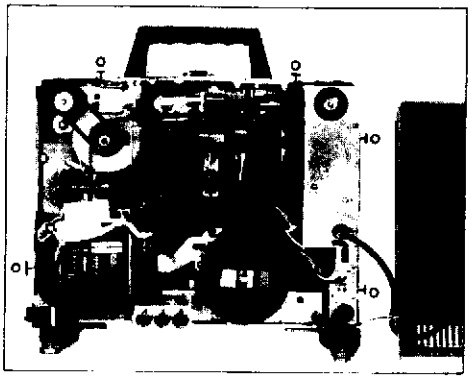
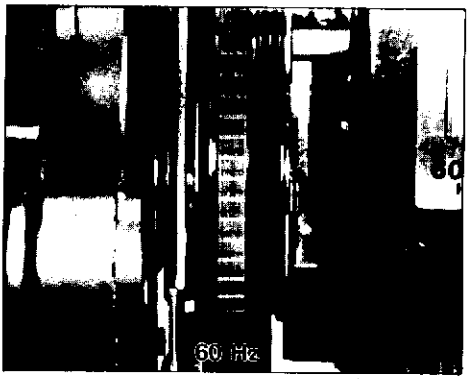
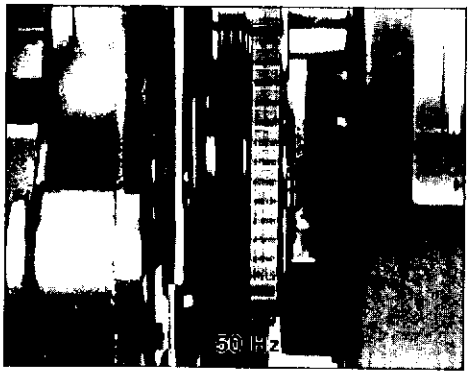


Fig. #41

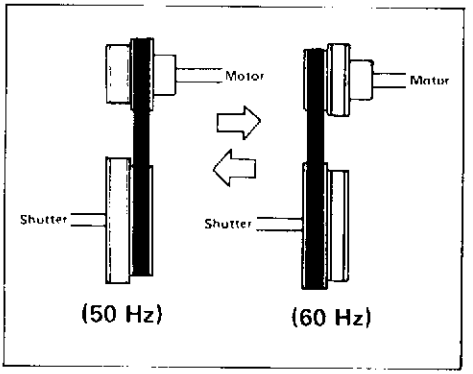


(Fig. #42)

2. Turn the inching knob, at the same time guiding the motor belt first to other motor pulley, and then to the other shutter pulley. (Fig. #42, 43, 44)



(Fig. #43)



(Fig. #44)

3. To change back, reverse the procedure.

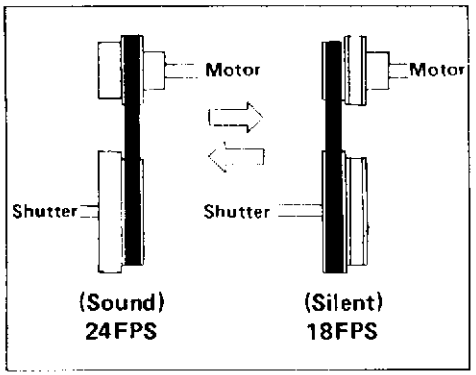
Note: 50/60 Hz models do not have silent speed (18FPS).

E. SILENT FILM OPERATION (OPTION)

Models fitted with optional 2-position motor and shutter pulleys (18/24 FPS silent and sound speed either at 50 Hz or 60 Hz) may be shifted from 24FPS sound speed to 18FPS silent speed by following the steps below.

DISCONNECT POWER CORD

1. Unscrew 5 screws and remove the rear cover. (Fig. #41)
2. Turn the inching knob, at the same time guiding the motor belt first to the smaller motor pulley, then to the larger shutter pulley. (Fig. #45)



(Fig. #45)

3. To change back to the sound speed, reverse the procedure.

Note : 50/60 Hz (sound speed only) models do not have the silent speed.

The chart below will assist in selecting the proper pulley combination.

OPERATION	MOTOR PULLEY ASSY	SHUTTER PULLEY ASSY	MOTOR BELT
100/110/120V or 220/240V 50/60Hz sound only 24 FPS	322-12101	322-11872	322-12181
100/110/120V or 220/240V 60Hz sound & silent 18/24 FPS	322-12401	322-11852	322-12181
100/110/120V or 220/240V 50Hz sound & silent 18/24 FPS	322-12501	322-11862	322-12181

F. DUAL VOLTAGE APPLICATIONS (OPTION)

In many countries where more than one electrical power source is common, special models with selective dual voltage requirements are available.

Typical combinations would be 110/220V, or 120/240V.

To select the appropriate voltage, open the lamp house door as already described in the lamp replacement procedures.

Inside of the lamp house, at the upper left hand corner, the voltage selector plug and socket are provided. (Fig. #46)

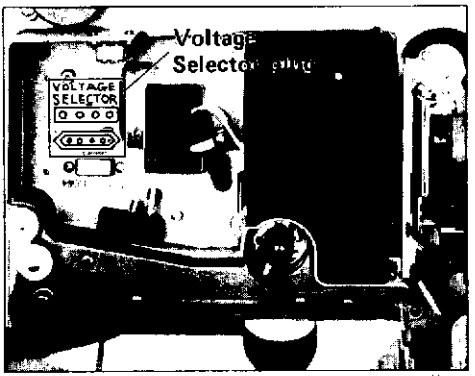
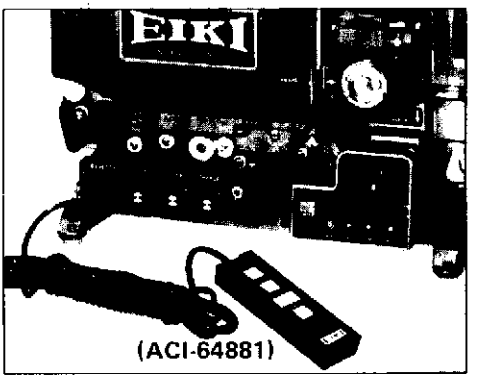


Fig. #46



(Fig. #47)

DISCONNECT POWER SUPPLY CORD

Select the appropriate voltage prior to plugging in the projector.

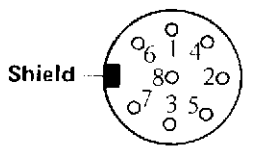
When returning the projector to an area using higher voltage, BE SURE TO SWITCH IT TO THE CORRECT VOLTAGE before plugging it in.

G. REMOTE CONTROL (ENT-SERIES ONLY)

Built in access to the control functions of "STOP", "Forward", "Lamp", and "Reverse" may be remotely controled with the optional accessory. (Fig. #47)

For custom installations, the remote control connector may be interfaced with a momentary contact between the connector pins below; (Fig. #48)

Pins No. 2 & 4 : "Reverse"
Pins No. 3 & 4 : "Lamp"
Pins No. 6 & 4 : "Forward"
Pins No. 7 & Shield: "STOP"

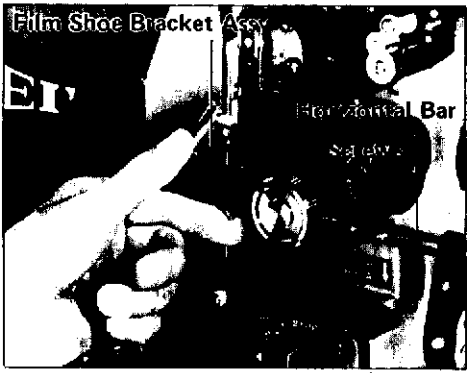


(Fig. #48)

H. INSTALLATION OF OPTIONAL ANAMORPHIC LENS HOLDER

(1) Depress the Self-Thread control lever and expose 2 mounting screws. (Fig. #49)

(2) Remove Film Shoe & Bracket assy. (See Fig. #49)



(Fig.#49)

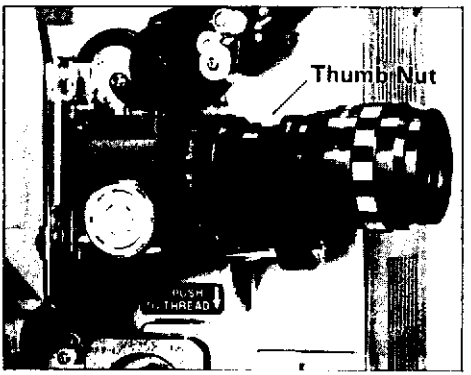


Fig. #50

(3) Remove 2 screws and carefully remove the horizontal bar which is a part of self-threading guide mechanism. Inside of the bar is a spring. Hold the bar to prevent it from popping out. Don't lose the spring.

(4) Put 2 screws on the Anam/Lens holder bar, and insert the spring into the bar hole.

(5) Mount the Anam/Lens holder assy and tighten 2 screws. Keep the horizontal position of the bar. (Fig. #49)

(6) Reinstall the Film Shoe & Bracket assy.

(7) Release the Self-Thread control bar by slightly tugging the last roller.

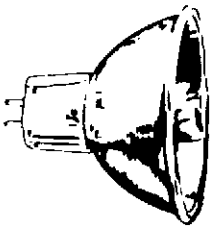
(8) Swing up the Anam/Lens holder ring and attach Anamorphic lens. Turn the thumb nut to fix the lens. (Fig. #50)

16. RECOMMENDED SPARE PARTS AND ACCESSORIES

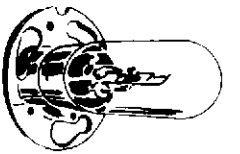
When placing an order, using following part Nos. is suggested.

Part No. for USA & Canada only	Part No. for other countries	Descriptions
5100	AC-32021	Halogen Lamp ELC/24V 250W
5102	AC-32011	Halogen Lamp EJL/24V 200W
5104	AC-40111	Exciter Lamp BRK/4V 0.75A
F05-6030	F05-6030	Main Fuse 5A
F02-5020	F02-5020	Amp. & Exciter Lamp Fuse 2A
5460	AC-70211	Microphone
5816	ACI-64881	Hand-held Remote Control (ENT)
5030	AH-20201	Anamorphic Lens "C" size
5425	ACI-33501	Anamorphic Bracket "C" size
5024	AH-20101	Zoom Conversion Lens "C" size (x 0.75 to x 1.25)
5067	AH-20111	Zoom Conversion Lens 16-S "D" size (x 0.75 to x 1.30)
5059	AH-10101	Lens 12.5 mm (0.5") F1.4
5060	AH-10201	Lens 25.0 mm (1") F1.5
5061	AH-10301	Lens 38.0 mm (1.5") F1.5
5019	ACI-30101	Lens 50.0 mm (2") F1.2 (Standard)
5062	AH-10401	Lens 65.0 mm (2.5") F1.5
5063	AH-10501	Lens 75.0 mm (3") F1.8
5064	AH-10511	Lens 75.0 mm (3") F1.8 Tele-Cine Lens
5066	AH-10601	Lens 100.0 mm (4") F2.2
5026	AH-20301	Wide-angle or Telephoto Conversion Lens (x 0.8 to x 1.25)
322-12181	332-12181	Motor Belt
322-12101	322-12101	Motor Pulley assy 50/60 Hz 24FPS standard
322-11872	322-11872	Shutter Pulley assy 50/60 Hz 24FPS standard

Part No. for USA & Canada only	Part No. for other countries	Descriptions
322-12401	322- 12401	Motor Pulley assy 60Hz 18/24FPS optional
322-11852	322- 11852	Shutter Pulley assy 60 Hz 18/24FPS optional
322-12501	322- 12501	Motor Pulley assy 50 Hz 18/24FPS optional
322-11862	322- 11862	Shutter Pulley assy 50 Hz 18/24FPS optional

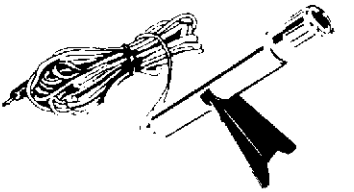


Projection Lamp ELC/24V 250 W
If replacement ELC lamp is not available, EJL/24V 200W lamp may be used. The EJL gives about 20% less light.

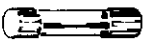


Exciter Lamp
Type BRK/4V 0.75A

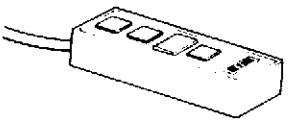
Main Fuse 5A



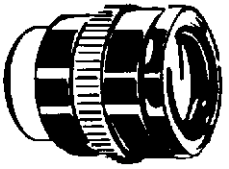
Microphone



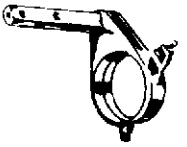
Amp. & Exc. Lamp Fuse 2A



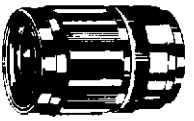
Hand Held Remote Control
(ENT only)



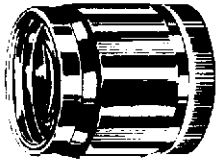
Anamorphic Lens "C" Size



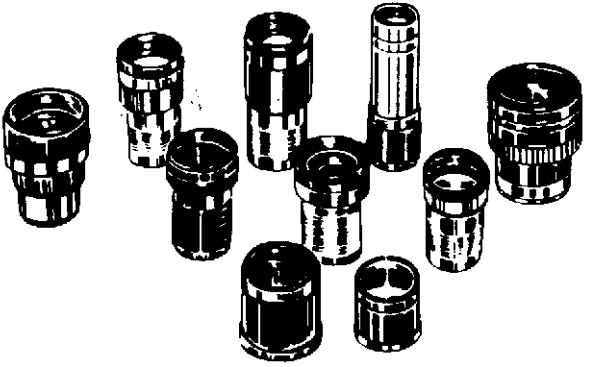
Anamorphic Lens Bracket "C" size



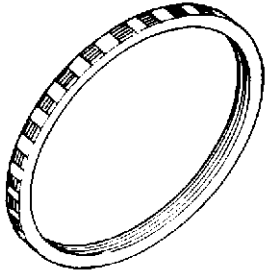
Zoom Conversion Lens "C" size



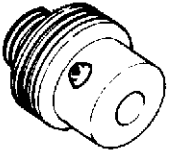
Zoom Conversion Lens 16-S "D" size



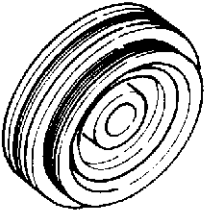
Additional Lenses



Motor Belt



Motor Pulley



Shutter Pulley

17. CLEANING AND MAINTENANCE

The EIKI SNT/ENT projector has been designed to provide years of trouble free services.

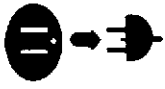
All maintenance such as lubrications and adjustments should be referred to a qualified EIKI service technician.

To keep your projector looking and operating like new the following items should be checked and cleaned by the operator.

1. Lens: Clean with soft lens tissue.
2. Film gate and aperture plate:
   a. Set projector in "STOP" position.
   b. Push the Film Shoe Bracket assy towards the lens until it locks in position (Fig. #49)
   c. Pull out the film shoe and bracket assy from the top. (Fig. #49)
   d. Brush and clean with a soft brush and re-install.
   e. Apply a slight push to the self-thread lever to close the film shoe bracket assy.
3. Film rollers : Clean and wipe dry with isopropyl alcohol.
4. Sound focus lens : Brush or blow off dust and lint.
5. Projector: Wipe off covers with a damp cloth and keep them closed when projector is not in use.
   The front elevator feet should always be up before transporting or storing the projector.

Do not oil or lubricate any part of this projector. Refer to your authorized EIKi dealer.

6. Replacing Fuses: SNT/ENT projector is provided with 5A main fuse, 2A amp. fuse, and 2A exc. lamp fuse, which are all located at the bottom of the rear cover. To replace fuse, unplug projector. Fuse holders may be unscrewed using a Phillips + screwdriver (Fig. #51)



DISCONNECT POWER CORD

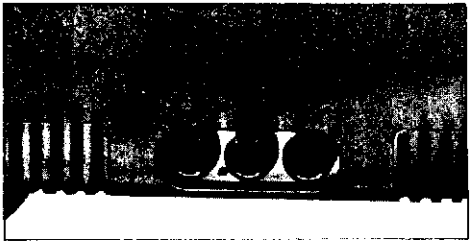


Fig. #51

18. OPERATOR TROUBLESHOOTING GUIDE

SYMPTOM	PROBABLE CAUSE & CHECK
1. No power to motor or lamp (Pilot lamp not on)	1. Make sure AC power cord is properly plugged in and the wall outlet has power. 2. Check for defective power cord. 3. Check for defective main fuse 5A.
2. Motor runs but film doesn't advance	1. Check for worn or broken motor belt. 2. RUN/STILL control lever in STILL position.
3. Film speed is too fast or too slow	1. Motor belt is not on the correct pulleys.
4. Motor runs, film advances, but lamp does not come on	1. (SNT only) Rotary switch not in lamp position. 2. Defective lamp. 3. Lamp is not seated in the lamp socket correctly. 4. (ENT only) Self-Thread lever is depressed.
5. Film is not self-threaded properly	1. Check for poor or damaged film leader. 2. Film is not properly inserted into film channel. 3. Self-Thread lever is not depressed. 4. RUN/STILL control lever in STILL position. 5. Film shoe & bracket assy not seated properly.

SYMPTOM	PROBABLE CAUSE & CHECK
6. No sound (Exciter lamp On)	1. Amplifier volume control not turned up. 2. Check for correct OPT/MAG switch position. 3. Check if internal, or external speaker is plugged in properly. 4. Check for defective 2A Amp. fuse. 5. Check for defective speaker cord. 6. Check for defective speaker.
7. No sound (Exciter lamp not On)	1. Amplifier volume control/switch not turned on, nor up. 2. Check for defective Exciter lamp fuse 2A. 3. Check for defective Amp. fuse 2A. 4. Check for correct OPT/MAG switch position. 5. Check for defective exciter lamp.
8. Poor sound	1. Check position of volume control, treble and bass controls. 2. Check for incorrect exciter lamp (must be BRK type). 3. Check for dirt in the solar cell, or in the optical sound lens path. 4. Check film sound track. 5. Clean exciter lamp. 6. Check for defective speaker.
9. Poor picture	1. Poor focus. Refocus lens. 2. Defective film. 3. Clean lens with soft tissue or lens cleaner both front and rear. 4. Remove and clean film shoe and film gate.

SYMPTOM	PROBABLE CAUSE & CHECK
10. Insufficient illumination	1. High-Low switch is in Low position. 2. Lamp not seating in the lamp socket properly. 3. Lamp may be defective.
11. No rewind, or poor rewind	1. (SNT only) Rotary switch not in Rewind position. 2. Film sensor roller is lifted up. 3. (ENT only) Self-Thread control lever is deperessed down.
12. No P. A. System	1. Defective microphone. 2. Amp. switch not turned on, nor up. 3. Projector is in Reverse or Rewind. Switch projector to Forward, and to STOP and try P. A. again.

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