

Film-Tech

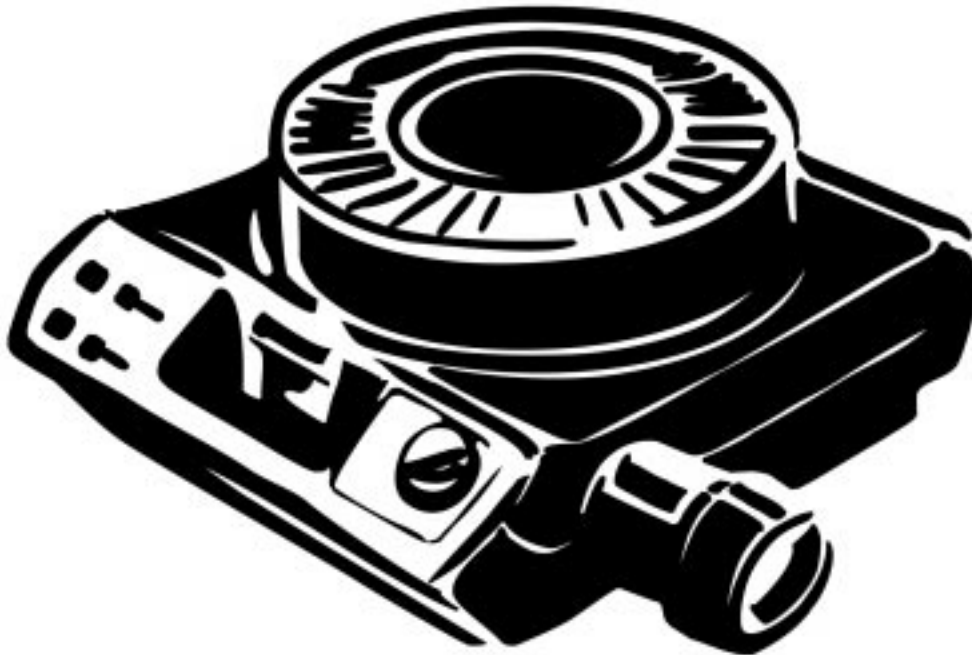
The information contained in this Adobe Acrobat pdf file is provided at your own risk and good judgment.

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.

If you are not a qualified technician, please make no adjustments to anything you may read about in these Adobe manual downloads

www.film-tech.com

*Long lamp life-
Brighter colors!*
*Lampe longuedurée-
Couleurs plus
éclatantes!*



KODAK CAROUSEL® Slide Projector



CONSUMER IMAGING

Important Safety Instructions

When using your projector, always follow basic safety precautions:

1. Read and understand all instructions before using this equipment.
2. Operate this projector with 110- to 125-volt 60 Hz current only. Incorrect voltage can cause projector malfunction.
3. Close supervision is necessary when any appliance is used by or near children, or others who may not understand the need for these precautions. Do not leave the projector unattended during use.
4. Be careful not to touch hot parts. For lamp replacement, allow the module to cool before touching the lamp and the surrounding area. Do not place the lamp module on heat-sensitive surfaces.
5. Do not operate your projector if the cord is damaged or if the projector has been dropped or damaged (see “How to Obtain Service” on page 29).
6. Position the cord so that it is not tripped over, pulled, or placed in contact with hot surfaces.
7. If an extension cord is necessary, use a cord with a current rating at least equal to that of the projector. Cords rated for less amperage than the projector may overheat.
8. Always unplug the projector from the electrical outlet before cleaning and servicing and when it is not in use.
9. Allow the projector to cool before storing.
10. Do not immerse this equipment in water or other liquids.
11. Do not disassemble this projector. Use a qualified service technician when service or repair is required. Incorrect reassembly can cause electric shock the next time the projector is used.
12. Use only safety electrical low-voltage (SELV) devices.
13. The use of an accessory attachment not recommended by the manufacturer may increase risk of damage.
14. Keep the air-flow vents unobstructed.

Save These Instructions



Operating Manual

**KODAK
CAROUSEL
Slide Projector**



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Serial Number

The serial number of your projector is printed on the label affixed to the power cord retainer on the base of the projector. Record this number, as well as the model identification, date, and place of purchase, for future reference.

Congratulations!

You have just purchased a KODAK CAROUSEL Slide Projector which:

- triples lamp life
- provides brighter and more vivid colors!



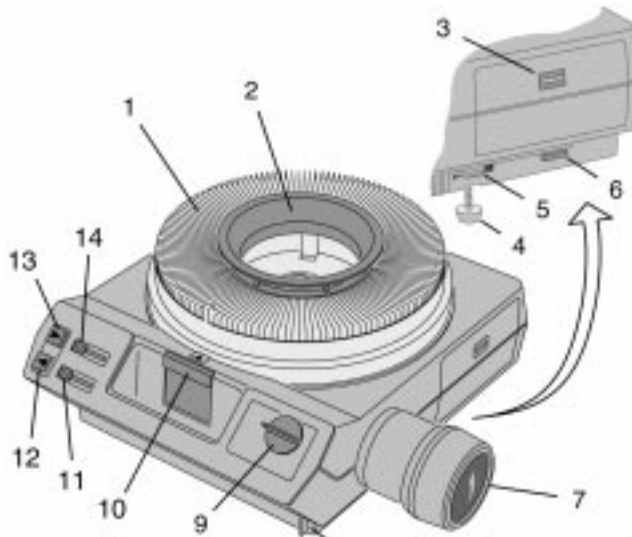
Introduction

Take the time to read the instructions in this operating manual to become familiar with your KODAK CAROUSEL® Slide Projector and how to operate it properly.

Overview

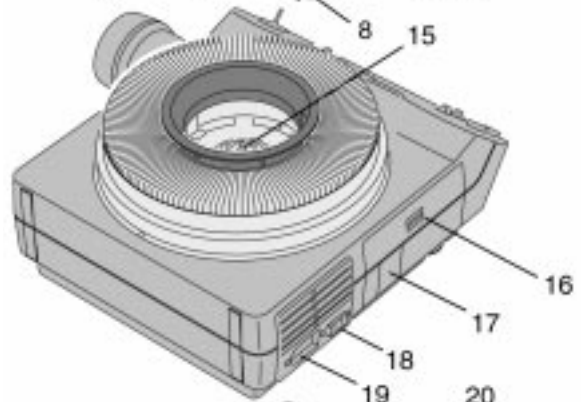
FRONT RIGHT

- 1 – Tray
- 2 – Lock Ring
- 3 – Storage Compartment/Remote
- 4 – Elevating Foot
- 5 – Elevating Adjustment Wheel
- 6 – Elevating Foot Release Button
- 7 – Lens
- 8 – Viewer (Model 5600)
- 9 – Focus Knob
- 10 – Select Bar
- 11 – Timer (Model 5600)
- 12 – Reverse
- 13 – Forward
- 14 – Power/Fan/Lamp



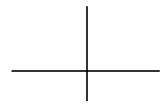
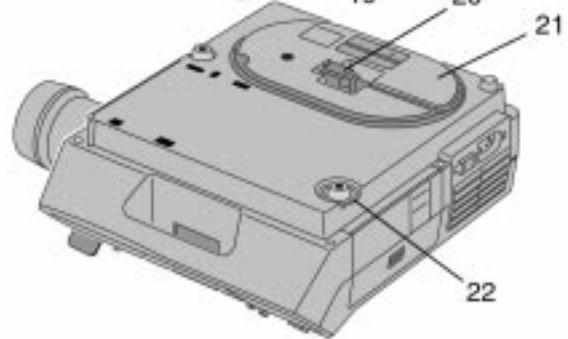
BACK RIGHT

- 15 – Tray Release Latch
- 16 – Lamp Module
- 17 – Reading Light
- 18 – Room Light Outlet (Model 5600)
- 19 – Remote Control Receptacle



BASE

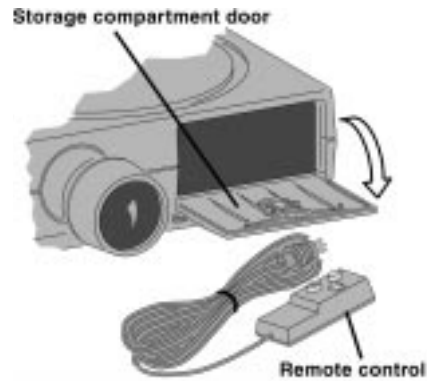
- 20 – Power Cord
- 21 – Power Cord Retainer
- 22 – Leveling Foot



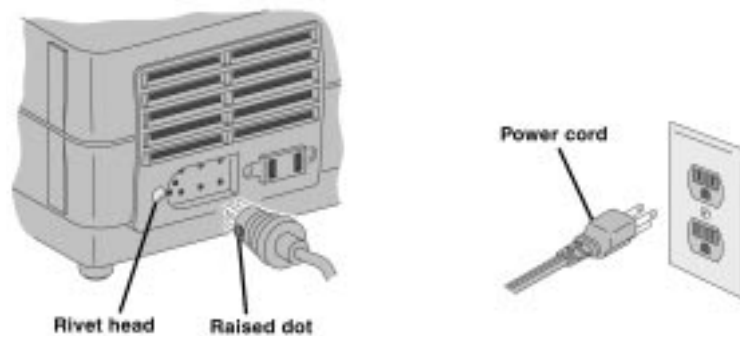
Operation

Startup

Open the **storage compartment** and remove the remote control.



Plug the 5-pin cable remote connector into the remote-control receptacle, aligning the **raised dot** with the metallic **rivet head**.



Plug the **power cord** into a grounded outlet with 110- to 125-volt 60 Hz current only.

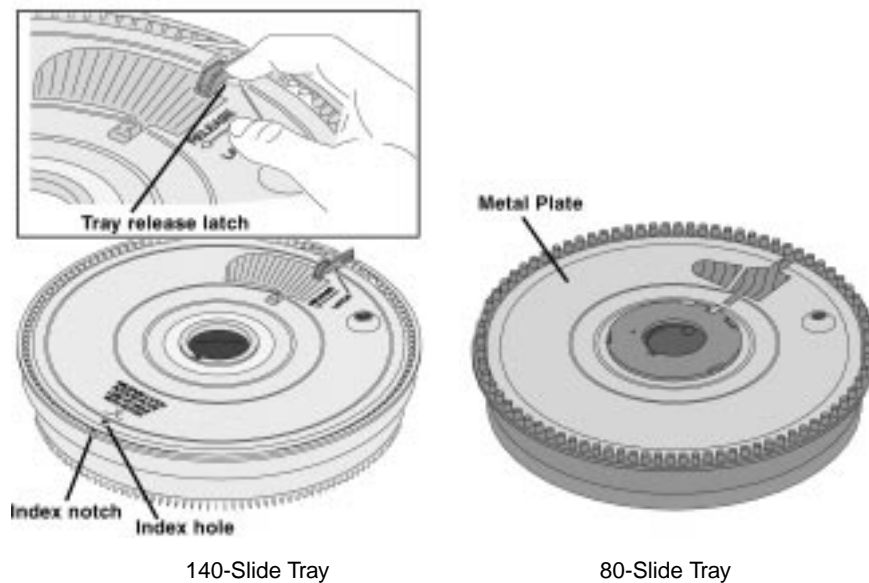
Loading the Slide Tray

A KODAK CAROUSEL® 140 Slide Tray is designed to hold up to 140 slides. Be sure that your slide mounts are in good condition; frayed or bent mounts may fail to drop into the projector. A variety of slide trays are available with capacity up to 140 slides. See your dealer in Kodak products for a complete list of Kodak trays and accessories.

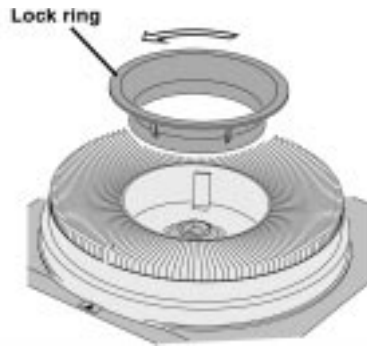
Note: Do not attempt to project slides mounted with sticky or loose tape.

Place the tray over the center post of the projector. Align the "0" slot with the gate index; the tray will drop into position.

If your **140-slide tray** does not drop easily, secure the lock ring, invert the tray, and align the **index hole** with the **index notch**. Slide and hold the **tray release latch** in the direction of the arrow, and turn the bottom plate until the index hole and notch align. Then release the latch. If you use an **80-slide tray**, rotate the metal plate on the bottom of the tray until it locks into position.



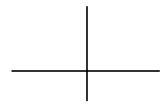
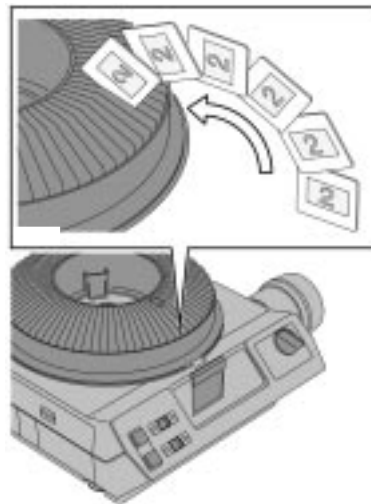
Adding Your Slides Remove the **lock ring** by turning it *counterclockwise* and lifting it off.



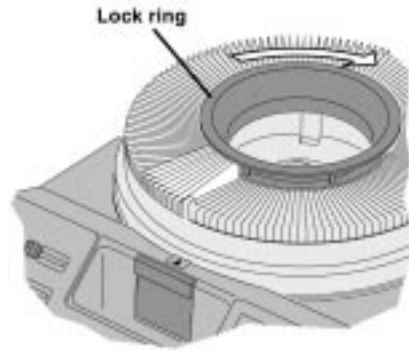
Check each slide's orientation (horizontal or vertical), and arrange them in the order you wish to show them. Then turn the slides upside down.

Number each mount in the upper right-hand corner of the film's shiny side.

Insert your first slide into the first slot in the tray so that the number is visible on the outer circumference of the tray. Insert your second slide in the second slot with the emulsion (dull side) facing your first slide, and so on.

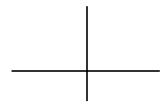
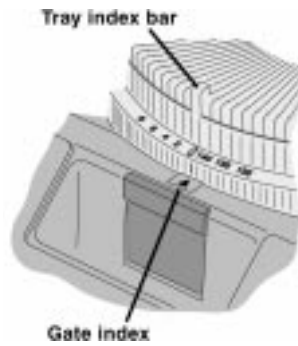


Replace the lock ring by turning it *clockwise* until it is secure



Tray

Place the loaded slide tray on the projector. Align the **tray index bar** with the **gate index**. The tray will drop into position.



Removing the Tray To remove the slide tray:

- press the **select bar** all the way down
- align the **tray index bar** with the **gate index**.



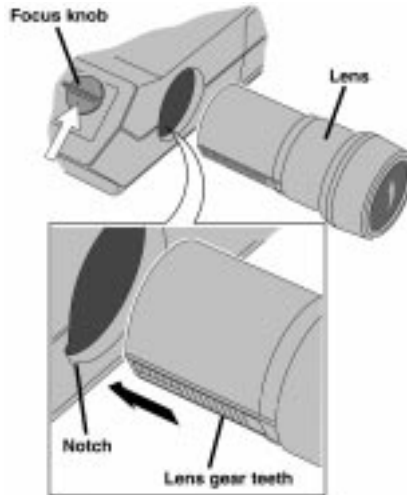
You can then lift off the tray.



Projecting Your Slides

Lens

To insert a **lens**, push the **focus knob** up and position the **lens gear teeth** on the lens barrel with the **notch** on the projector.



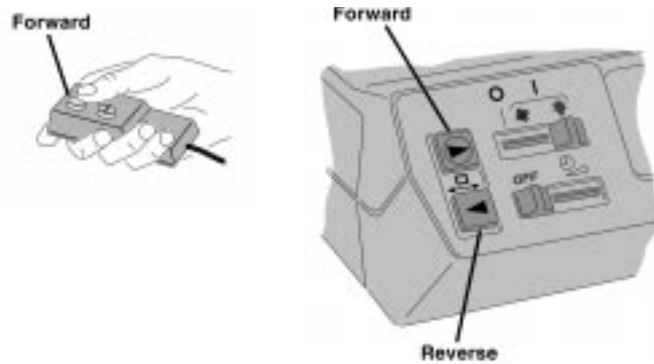
Lamp

Slide the power switch to **lamp**.



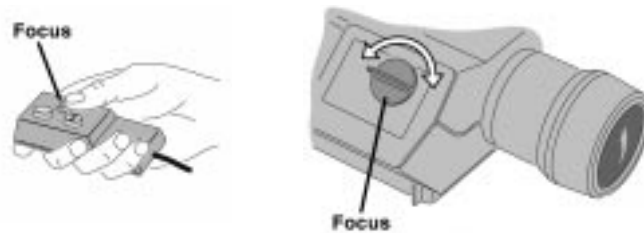
Forward and Reverse

Press the **forward** button on the projector or the remote control to project the first slide. To change slides, briefly press the **forward** or **reverse** buttons.



Focus

Focus your first slide using the **focus** knob on the projector or the **focus** button on the remote control (Models 4400 and 5600 only).



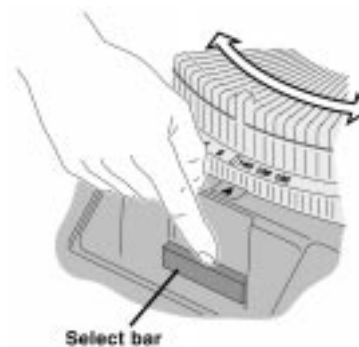
Autofocus (Models 4400 and 5600 only)

The **autofocus** feature automatically focuses each slide after you focus your first slide manually. If there is a mix of slide mounts in the tray (cardboard, plastic, and glass), it may be necessary to manually refocus between mount-type changes. The focus button on the cabled remote can be used for Models 4400 and 5600.

Random Projection

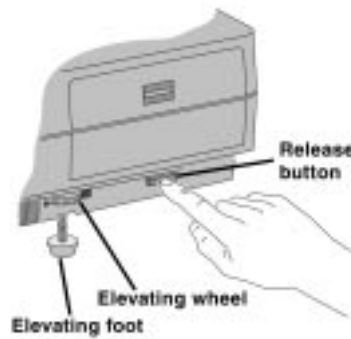
For random projection of any slide in the tray:

- press and hold down the **select bar**,
- rotate the tray to the desired slide, and
- release the select bar.

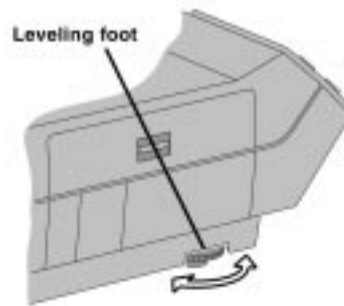


Screen Image

Use the **elevating foot** to horizontally center the projected image on the screen. To release the foot, press the **release button**, while lifting the front of the projector to the desired height. Use the **elevating wheel** to make fine adjustments.



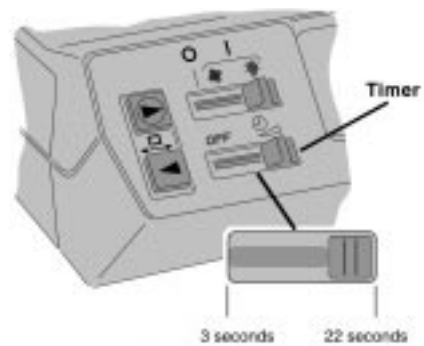
If the image is not level, make an adjustment by turning the **leveling foot** at the rear of the projector.



Timer (Models 4400 and 5600 only)

To time your slides, use the **timer** switch for slide changes from 3 to 22 seconds.

To interrupt the timer, press either the forward or reverse button. For manual operation, slide the timer switch to Off.



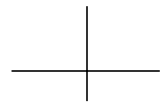
**Reading Light
(Model 5600 only)**

To illuminate a small area for reading, lift the reading light cover while the projector lamp is on.



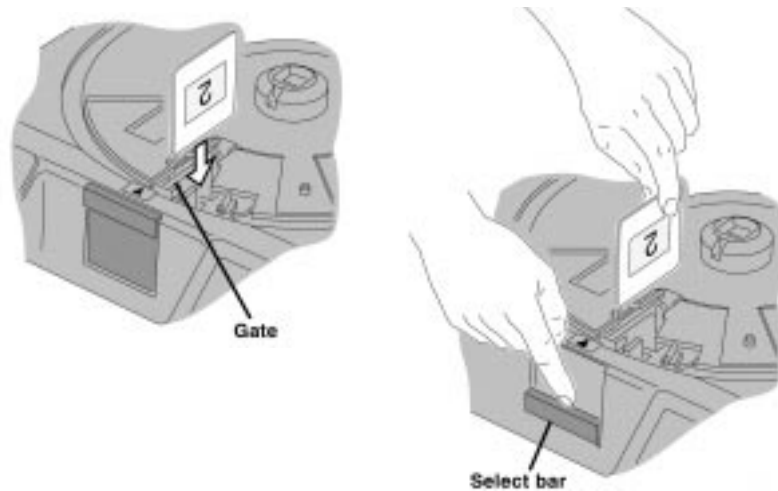
**Room Light Outlet
(Model 5600 only)**

Plug any standard room light into the **room light outlet** and turn it on. It will remain on until the projector is turned to the lamp position (when a darkened room is required). When you turn the projector off at the end of your presentation, the room light will come on again.



Single Slides

To project single slides, slide the power switch on. Remove the tray and insert a slide upside down into the projector **gate**. Push the slide all the way down.



After viewing the slide, press forward, reverse, or the **select bar** to eject the slide.

Selecting Slide Projection Lenses

When buying a lens, consider features such as focal length (measured in millimetres), aperture (designed as an f /stop), and the lens design (curved or flat).

When selecting a lens, remember that the shorter the focal length (i.e., the smaller the f /number), the brighter the projected image. Also, a curved-field lens, in combination with cardboard open face mounts from an automated mounting process, provide superior projection quality. A flat-field lens is the best choice for glass-mounted slides.

Choosing a Curved- or Flat-Field Lens

The lens you select depends on how you use your projector and what type of slide mount you use. So that you may choose the lens that best meets your needs, we do not include a lens with the projector.

To obtain the best results of a projected image, insert slides with the emulsion side toward the projection lens, slide curve toward the light source.

A flat-field lens works best for:

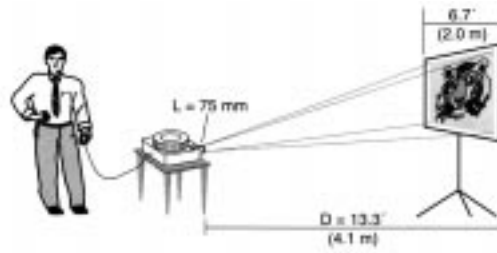
- general home projection
- glass mounts
- plastic mounts
- mixed mounts
- non-embossed cardboard mounts
- rear-projection applications
- duplicated slides

A curved-field lens works best for:

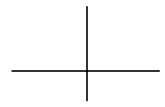
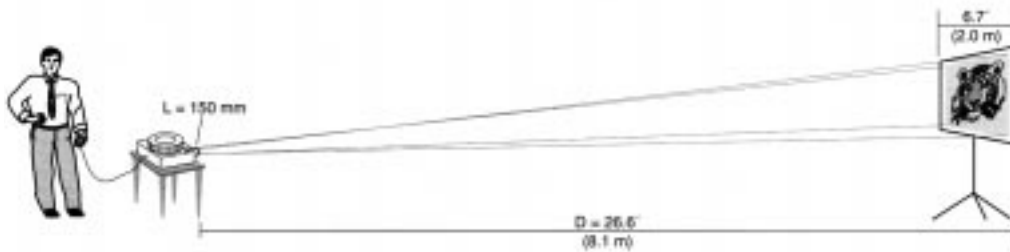
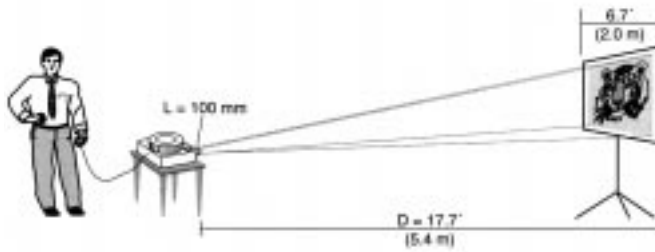
- embossed cardboard mounts
(Embossed mounts have beveled edges around the aperture. Kodak Premium Processing and Kodak Processing labs provide embossed mounts.)

Lens Focal Length/ Projector Distance

Use the illustration on the following page to help determine the lens focal length and projector distance.



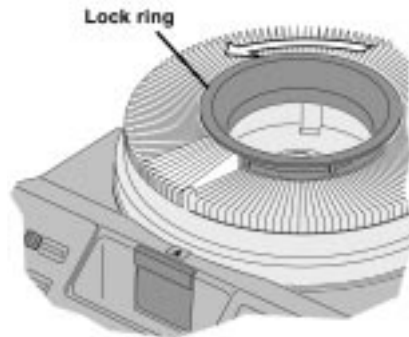
L	D
75 mm	13.3'
100mm	17.7'
125 mm	22.2'
150 mm	26.6'
175 mm	31.0'
200 mm	35.4'



Editing Your Presentation

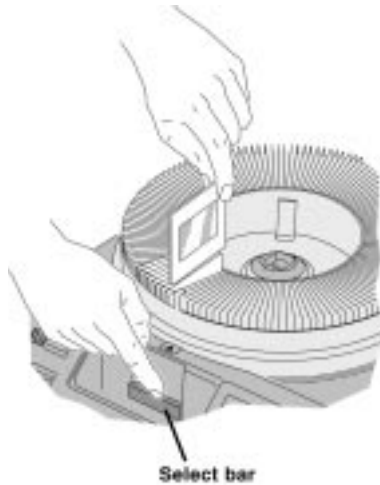
Removing the Lock Ring

To *add or remove* slides in the tray, you must first remove the **lock ring**. Turn the ring counterclockwise and lift off.



Removing a Slide

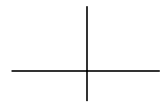
Rotate the tray to the slide you wish to remove. Firmly press and hold down the **select bar** to eject the slide.



Adding a Slide

When the lock ring is off, you can add a slide to any empty slot. (See "Adding Your Slides" on page 6.)

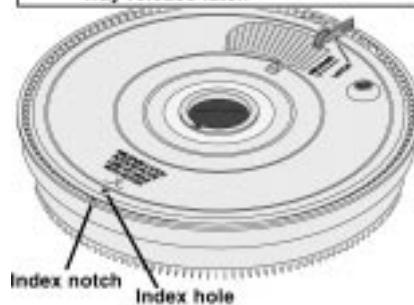
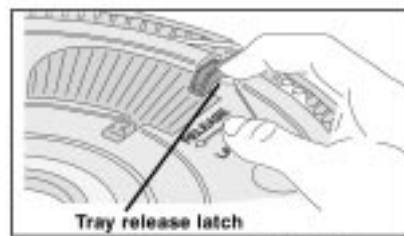
Replace and secure the lock ring.



Clearing a Gate Jam

To remove a defective slide or foreign object stuck in the projector gate, you need to remove the tray.

- Slide the **tray release latch** in the direction of the arrow, and
- with your other hand, lift off the back of the tray.



With the lock ring firmly in place, turn the 140-slide tray upside down. Retract the **tray release latch** in the direction of the arrow and align the **index hole** with the **index notch**. (For an 80-slide tray, rotate the metal plate until it locks into position.) Put the tray aside.

Remove the slide or object from the projector gate by pressing the forward button or removing the slide manually.

Remount damaged slides to protect your projector and slides from subsequent damage.

Using the Built-In Viewer (Model 5600 Only)

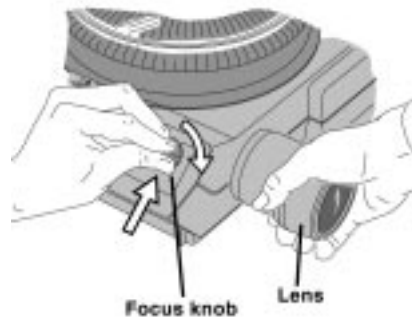


Important

Before opening the viewer, you must remove the projection lens from the projector.

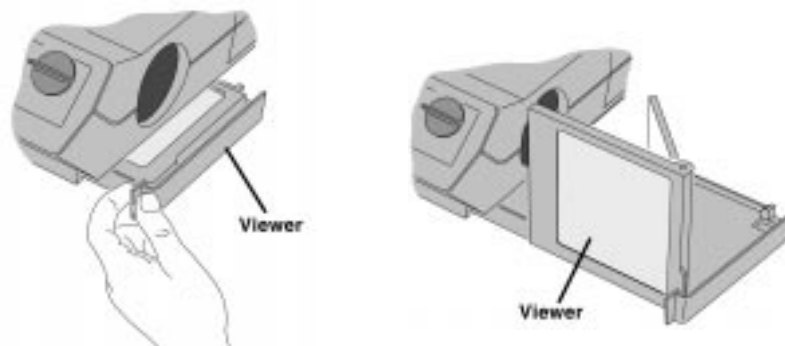
Removing the Lens

Turn the **focus knob** to the horizontal position. Push the knob toward the top of the projector as you withdraw the **lens**.



Opening the Viewer

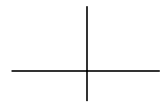
Grasp the **viewer handle** and pull it out from the base of the projector. It will pop into place.



Slide the power switch to *lamp* to project your slides.

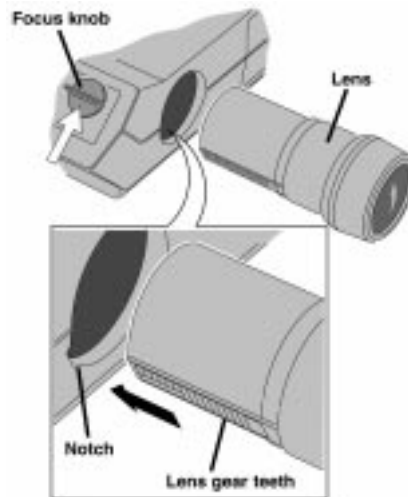
Closing the Viewer

To close the viewer, fold it and push it back into the body of the projector.



Reinserting the Lens

To reinsert the **lens**, push the **focus knob** up and position the **lens gear teeth** on the lens barrel with the notch on the projector.



Shutdown

To shut down,

- remove and store the tray
- slide the power switch to *off*

Your projector will remain warm for several minutes.

Maintenance

To ensure a long life and trouble-free operation for your projector:

- Allow the air to flow freely around the projector.
- Do not recirculate warm air.
- Keep the projector dust free.

Your CAROUSEL Projector requires no lubrication; all bearings are self-lubricating.

Projection Lamps **Included:** FHS lamp, 70-hour lamp life (medium-brightness)

Sampling of other lamps:

EXY (200 hours/less brightness)

EXR (35 hours/maximum brightness)

Note: An EXW lamp is not recommended for older models of CAROUSEL Projectors. Contact the Kodak Information Center at 1-800-242-2424 in the U.S. or 1-800-465-6325 in Canada if you need help identifying your particular model.

Lamp Tips

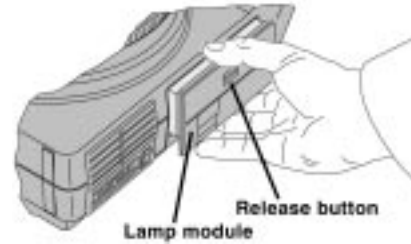
- Projector operation on line voltages above 125 volts greatly reduces the lamp life.
- Unplug the projector before changing the lamp.

Changing the Projection Lamp

Slide the power switch to Off and unplug the projector.

Allow the projector and lamp to cool for about 10 minutes. Push the lamp-module **release button** and remove the **lamp module**.

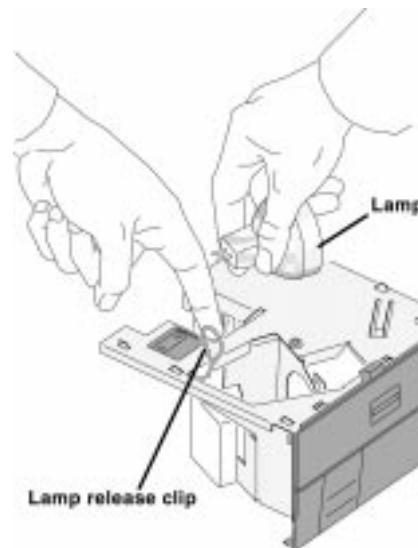
Note: There is an additional safety latch, which reduces the chance of an accident with a loosely inserted lamp module, that may cause some resistance. To release the latch, you may need to apply extra effort when you pull out the module.



Lift up the **lamp release clip**. Carefully remove the worn **lamp** from the socket and place it on a heat-resistant surface.

Insert a new lamp into the socket. Push down to tightly seat the replacement lamp.

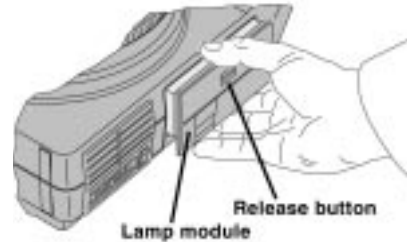
Relatch the clip in the forward position and push the lamp module all the way back into the projector until it latches.



Cleaning the Condenser, Heat-Absorbing Glass, and Mirror

To clean the condenser, heat-absorbing glass, or mirror, you must disassemble the lamp module.

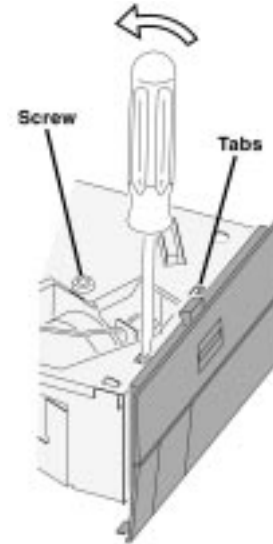
Slide the power switch to Off and unplug the projector. Allow the projector to cool about 10 minutes. Push the lamp-module **release button** and remove the **lamp module**.



Use a torx-head screwdriver to remove the **screw**.

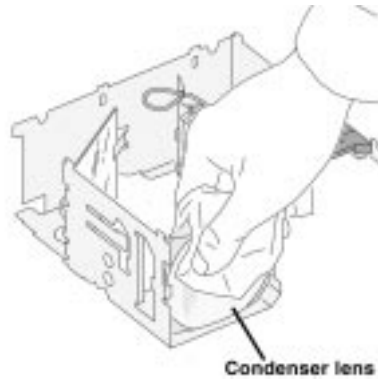
Using a flat-blade screwdriver, apply ample pressure to release each of the metal **tabs**.

Lift off the top of the lamp module.



Condenser Lens

You can clean the **condenser lens** in place, or by pulling it out. Wear gloves to prevent fingerprints.



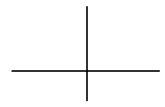
Caution

The heat-absorbing glass is fragile. Handle it only when cool.

Heat-Absorbing Glass

(For lamp modules with a heat-absorbing glass.)

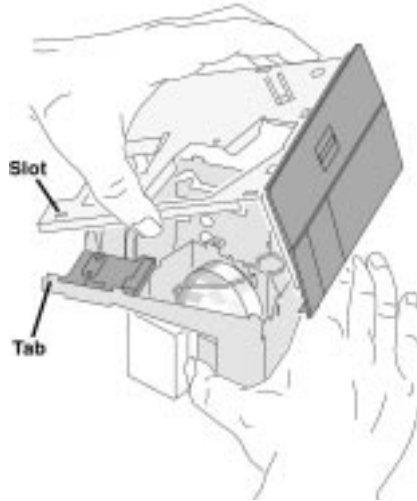
The green-tinted **heat-absorbing glass** easily removes for cleaning.



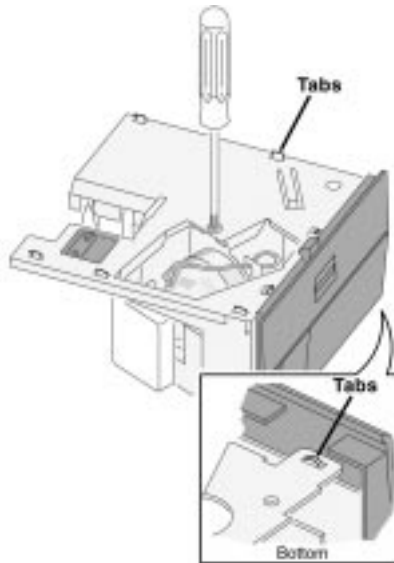
Reassembling the Lamp Module

To reassemble the lamp module, you will need to align and insert each **tab** into its appropriate **slot**.

Start with the tabs in the rear of the lamp module.



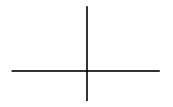
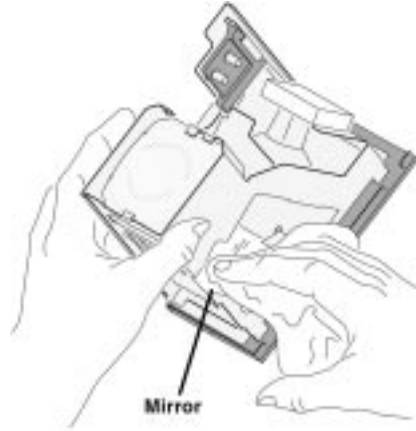
Insert the remainder of the **tabs** into slots until all 7 tabs on the top and 2 on the bottom are secured. Insert the screw and tighten. Then insert and seat the lamp.



Mirror

To clean the **mirror**, invert the lamp module to reach the mirror. Gently clean the mirror with a soft, lint-free cloth moistened with lens cleaner.

When your maintenance is complete, push the lamp module back into the projector.



Troubleshooting

Consult this guide before calling for service.

PROBLEM	CAUSE	CORRECTION
Projector does not operate	No power to projector	Plug power cord into suitable electrical outlet. Set power switch to Lamp.
No illumination on screen with slide in projector gate	Power switch on Off or Fan	Set switch to Lamp.
	Lamp burned out	Install new lamp or lamp module
	Lamp not seated in socket	Check lamp.
Slide not in proper focus on screen focus.	Slide itself not sharp	Examine slide for proper focus.
	First slide in tray not properly focused	Focus center of first slide manually.
	Slide in different type of mount from others	Focus manually.
	Projection lens installed improperly	Read and follow the instructions for installing the lens.
Uneven edge-to-edge focus	Slide itself is not sharp	Examine slide.
	Curved field lens used with glass, plastic, or non-embossed mounts	Try a flat field lens. (See "Choosing a Curved- or Flat-Field Lens" on page 14.)
	Curved field lens used for rear projection	Use a flat field lens.
	Lamp performance	Uninstall new lamp and try again.
Autofocus motor runs continuously	Multi-aperture slide or matte-surface write-on slides in tray	Turn off autofocus.
Autofocus fails to operate	Lamp performance	Install new lamp and try autofocus again.

Troubleshooting

PROBLEM	CAUSE	CORRECTION
Slide fails to drop into projection position	Tray base plate not properly indexed	Align the index hole and index notch.
	Tray not properly positioned on projector	Reposition tray on projector.
	Slide mount warped or frayed at corners slide.	Straighten mount or remount slide.
	Projector not level or tilted too high	Set projector on a stand equal with center of screen.
Uneven illumination on screen	Projection lamp not fully seated	Check lamp.
	Condenser lens not installed or not positioned properly in mount	Check condenser lens.
	Slide mount not seated properly in projector gate	Check slide position and slide-mount condition.
Projector won't cycle to next slide	Tray not properly positioned	Reposition tray.
	Slide or foreign object stuck in gate	See "Clearing a Gate Jam" on page 17.

Warranty

Kodak warrants this KODAK CAROUSEL Slide Projector to function properly for one year from the date of purchase.

If this KODAK CAROUSEL Slide Projector does not function properly within the warranty period, upon submission of dated proof of purchase, Kodak will repair it without charge, except for worn-out projector lamps. If Kodak is unable to repair the projector, the option of replacement or refund of the purchase price will be available.

Limitations

This warranty does not cover circumstances beyond Kodak's control, projector lamps, or problems caused by failure to follow the care and operating instructions in the manual.

Any modification to the original design of this projector nullifies this warranty.

Warranty service will not be provided without dated proof of purchase.

Kodak makes no other express warranty for this product.

Repair or replacement is Kodak's only obligation. **Kodak will not be responsible for any consequential or incidental damages resulting from the sale or use of this projector, regardless of the cause of such damages.**

Your Rights Under State Law

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

How to Obtain Service

Assistance

To obtain service or for assistance in using your KODAK CAROUSEL Slide Projector, contact the **Kodak Information Center** at **1-800-242-2424**, Monday through Friday, 8 a.m. to 8 p.m. (Eastern time). In Canada, call 1-800-465-6325, Monday through Friday, 8:30 a.m. to 5 p.m. (Eastern time). Or call Kodak in your country.

Shipping Instructions

To help us get your KODAK CAROUSEL Slide Projector back to you promptly, please enclose a note giving details of the problem, dated proof of purchase, and your complete name and shipping address. Pack the unit in a sturdy carton with ample packing material to protect the unit during shipping and handling.

Consumer Imaging
EASTMAN KODAK COMPANY
Rochester, New York 14650

www.kodak.com/go/projectors

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CONSUMER IMAGING

