

**3M**

# **9000 Series**

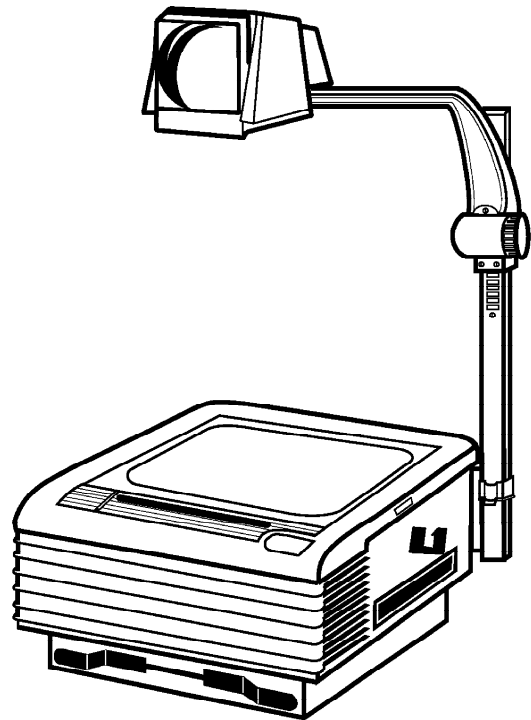
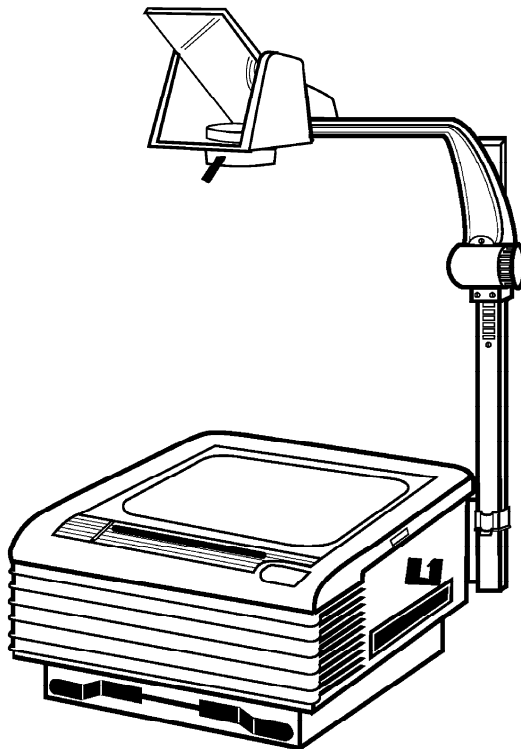
Overhead Projector  
Operator's Guide

# **Série 9000**

Rétroprojecteur  
Manuel d'utilisation

# **Serie 9000**

Retroprojector  
Manual del Operador



# IMPORTANT SAFEGUARDS

When using your photographic equipment, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions before using. Pay particular attention to areas where this symbol is shown.
2. Close supervision is necessary when any appliance is used by or near children. Do not leave appliance unattended while in use.
3. Care must be taken as burns can occur from touching hot parts.
4. Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged — until it has been examined by a qualified serviceman.
5. Position the cord so that it will not be tripped over, pulled or contact hot surfaces.
6. If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cords rated for less amperage than the appliance may overheat.
7. Always unplug appliance from electrical outlet before cleaning and servicing and when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
8. Let appliance cool completely before putting away or when replacing lamp. Loop cord loosely around appliance when storing.
9. To reduce the risk of electric shock, do not immerse this appliance in water or other liquids.
10. To reduce the risk of electric shock, do not disassemble this appliance, but take it to a qualified technician when service or repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.
11. The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.
12. Connect this appliance to a grounded outlet.
13. Disconnect this unit from its source of supply before replacing the projection lamp.
14. This unit is equipped with optical lenses and should not be exposed to direct sunlight.
15. Keep ventilation openings free of any obstructions.
16. This unit is assembled with a special power cable that, if damaged, must be replaced by the same type of cable. This power cable can be ordered from your local 3M Visual Systems Division Dealer and must be installed by a serviceman.

# SAVE THESE INSTRUCTIONS

The information contained in this manual will help you operate and maintain your overhead projector.

# PRECAUTIONS

Observer les précautions suivantes lorsqu'on utilise ce rétroprojecteur :

1. Lire attentivement les directives avant d'utiliser l'appareil. Porter une attention particulière aux passages où apparaît le symbole .
2. Faire preuve d'une grande vigilance lorsque l'appareil est utilisé par des enfants ou en présence d'enfants. Ne pas laisser sans surveillance un appareil en utilisation.
3. Veiller à ne pas se brûler en touchant les parties chaudes de l'appareil.
4. Ne pas se servir du rétroprojecteur si le cordon d'alimentation est endommagé ou si l'appareil est tombé ou est endommagé. Le faire inspecter par un technicien compétent.
5. Placer le cordon d'alimentation de manière qu'on ne trébuche pas, qu'on ne le tire pas par inadvertance et qu'il ne touche pas les parties chaudes de l'appareil.
6. Si on utilise une rallonge, choisir un cordon prévu pour une intensité au moins égale à celle de l'appareil. Les cordons prévus pour une intensité moindre risquent de surchauffer.
7. Débrancher l'appareil lorsqu'on ne l'utilise pas ou lorsqu'on doit le nettoyer. Ne pas tirer sur le cordon pour le débrancher, mais sur la fiche.
8. Laisser l'appareil refroidir complètement avant de le ranger ou de remplacer la lampe. Enrouler le cordon sans le serrer autour de l'appareil avant de le ranger.
9. Afin d'éviter les chocs électriques, ne pas plonger l'appareil dans l'eau ou tout autre liquide.
10. Afin d'éviter les chocs électriques, ne pas démonter l'appareil. En confier l'entretien ou les réparations à un technicien compétent. Incorrectement remonté, le rétroprojecteur peut produire des décharges électriques au moment de sa réutilisation.
11. L'utilisation d'accessoires non recommandés par le fabricant présente des risques d'incendie, de choc électrique ou de blessures.
12. Brancher l'appareil à une fiche reliée à une prise à la terre.
13. Débrancher l'appareil avant de remplacer la lampe de projection.
14. Comme il est doté de lentilles optiques, cet appareil ne doit pas être exposé directement au soleil.
15. Ne pas obstruer les orifices de ventilation.
16. Cet appareil est muni d'un câble électrique spécial. Tout câble endommagé doit être remplacé par le même type de câble. Le commander auprès de son distributeur de la division des systèmes visuels de 3M et le faire installer par un technicien.

# CONSERVER CE MANUEL

Ce manuel contient des renseignements utiles pour utiliser et entretenir votre rétroprojecteur.

# PRECAUCIONES IMPORTANTES

Al utilizar el retroproyector, han de seguirse siempre las siguientes instrucciones básicas:

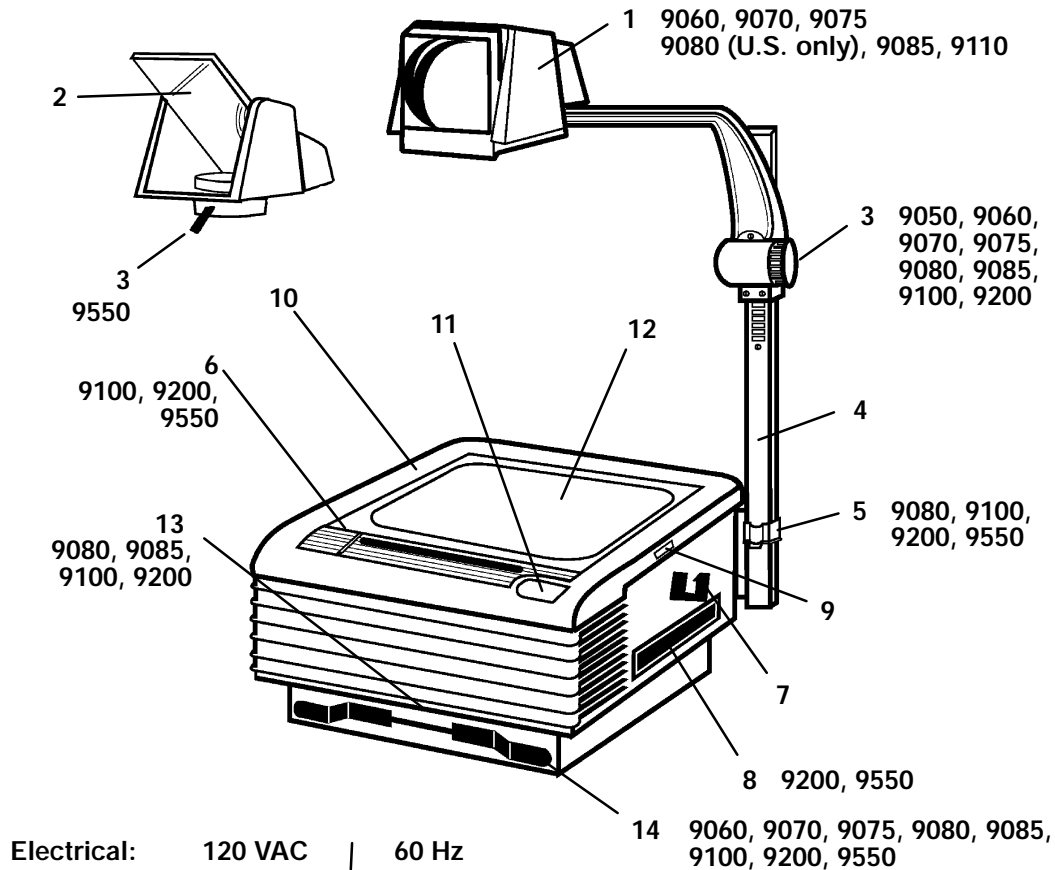
1. Lea y entienda todas las instrucciones antes de usar. Preste especial atención a las áreas donde se encuentra el símbolo .
2. Vigile de cerca si el retroproyector es usado por niños o cerca de ellos.
3. Hay que tener cuidado cuando se encuentre abierta la puerta de acceso a la lámpara, ya que si se toca en una zona caliente, se pueden producir quemaduras.
4. No hacer funcionar el retroproyector si tiene el cable defectuoso o si el retroproyector se ha caído o dañado. Es necesario que antes lo examine un técnico de 3M.
5. No dejar que cuelgue el cable sobre el borde de la mesa, ya que se podría dañar. No tocar las superficies calientes.
6. Si es necesario un cable más largo, puede utilizarse un alargador. Si se utilizan cables con menos amperios que el proyector, éste puede calentarse en exceso. Hay que tener cuidado de que el cable no se deforme ni se tire de él.
7. Desenchufar el retroproyector cuando no se use. No tire del cable para desenchufarlo de la pared. Desconéctelo tirando del enchufe.
8. Deje que la máquina se enfrie completamente antes de guardarse o de re-emplazar la lámpara.
9. Para evitar sacudidas eléctricas, no instale el retroproyector en zonas mojadas.
10. Para evitar el riesgo de sacudidas eléctricas, no desmonte el retroproyector. Llame a un técnico de 3M siempre que sea necesaria cualquier reparación, ya que el montaje incorrecto puede originar sacudidas eléctricas al utilizar la máquina.
11. No toque ni cubra la rejilla de ventilación cuando se esté usando el retroproyector.
12. El uso de cualquier accesorio no recomendado por el fabricante puede originar cortacircuitos y provocar incendios o heridas a personas.
13. Conecte el retroproyector a un enchufe que disponga de toma de tierra.
14. Desenchúfelo antes de cambiar una lámpara.
15. Evitar que se obstruyan las aberturas de ventilación.
16. Esta unidad está conectada mediante un cable especial que, si se daña, tiene que ser reemplazado con el mismo tipo de cable. Este cable puede ser ordenado (pedido) a su representante de venta local de 3M, y tiene que ser instalado por un técnico profesional.

# SIGA ESTAS INSTRUCCIONES

La información que aparece en este manual le ayudará a manejar y mantener el retroproyector de transparencias en perfecto estado.

# Product Description/Features

## Front View



Electrical: 120 VAC | 60 Hz

- |                          |                       |
|--------------------------|-----------------------|
| 1. Projection Head       | 7. Post Cradle        |
| 2. Projection Mirror     | 8. Carry Handle       |
| 3. Focus Knob            | 9. Top Cover Release  |
| 4. Post Assembly         | 10. Top Cover         |
| 5. Post Lock             | 11. On/Off Switch     |
| 6. Control Panel         | 12. Stage             |
| a. Lamp Changer          | 13. Color Tuning Dial |
| b. High/Low Lamp Switch* | 14. Cord Wrap         |
| c. Lamp Interlock Switch |                       |

\* On some models the switch is located inside the top cover.

## Service Information

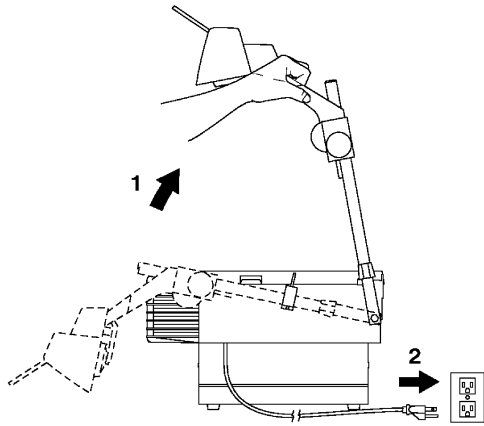
In the U.S. and Canada, please call us for

- |                       |                        |
|-----------------------|------------------------|
| - Product information | - Technical assistance |
| - Product assistance  | - Service locations    |

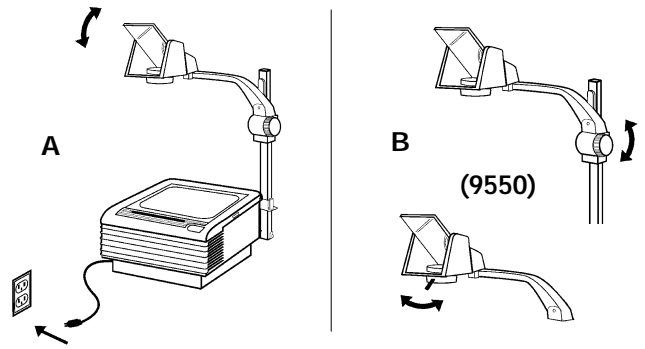
If you need product assistance or service, contact your dealer or:

**800-328-1371**

## Set Up

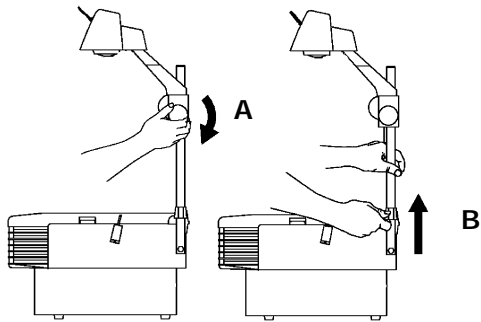


1. Raise the post until it locks into place.

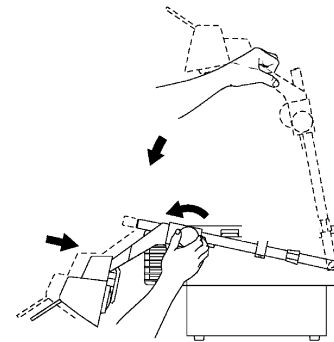


2. Plug in power cord and turn on. Adjust image to screen elevation (A).
3. Focus the projected image (B).

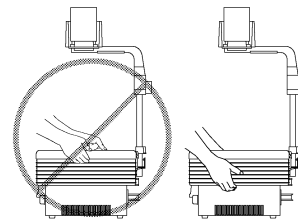
## Fold Down



1. Raise projection head (A) up to the maximum (except 9550).
2. Release the post lock (B).



3. Fold down the post. Secure the post in post cradle.
4. Rotate focus knob to minimum (except 9550).



5. Hold to lift projector.

## Lamp Replacement

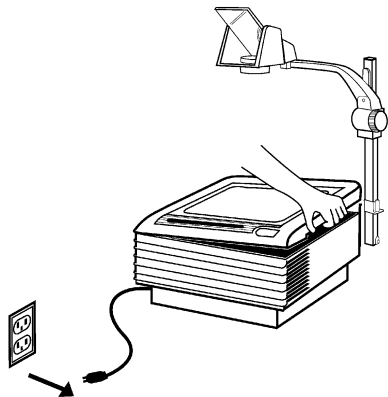


ENX – 82V, 360W  
 9050, 9060, 9070,  
 9080, 9100  
 FXL – 82V, 410W  
 9075, 9085, 9200



or FNT – 24V, 275W  
 EVD – 36V, 400W  
 9550 only

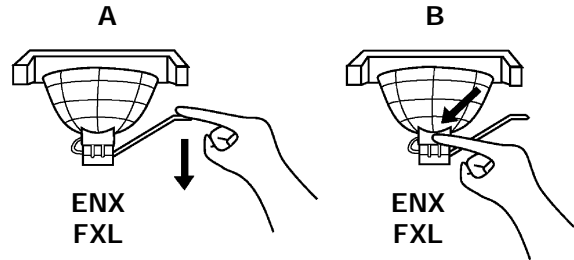
1. Turn projector off and unplug the power cord.
2. Lift up top cover.



### **⚠ WARNING**

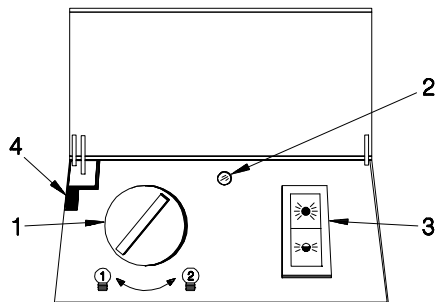
Lamp and adjacent metal parts are hot. Allow lamp to cool before replacing.

3. Remove and discard the old lamp. See Illustration (A).
4. Install new lamp.
5. Push fully and squarely into socket. See Illustration (B).



6. Close the top cover.

## Lamp Changer/Indicator



1. The 9080, 9085, 9100, 9200 and 9550 have a lamp changer feature.

### **Note**

**9080/9085 only:** To access the Lamp Changer Control, raise the Top Cover.

2. To activate the second lamp, rotate the lamp changer knob (1).
3. The 9550 has an indicator that lights up red (2). This visual reminder alerts the operator that one or both of the lamps are burned out or missing.

## High/Low Lamp Switch – 9070, 9075, 9085, 9100, 9200, 9550

### **Note**

Two lamps are provided with the 9200 and 9550.

1. The High-Low lamp switch (3) \* is located on the top front control panel.
2. High is recommended for LCD projection panels. Low is recommended for normal use.

### **Note**

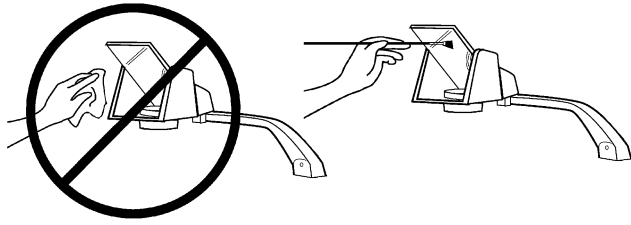
Operating the OHP in the Low lamp setting will extend lamp life.

### **Note**

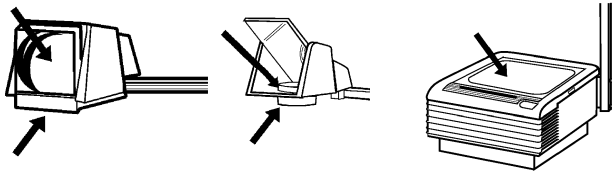
Opening the lamp changer will deactivate the lamp (Lamp Interlock Switch (4)).

- \* On some models the switch is located inside the top cover.

## Cleaning



1. The mirror in the open projection head is a front-surface mirror and must not be wiped clean.
2. Remove any surface dirt with a soft brush to avoid scratching the mirror.

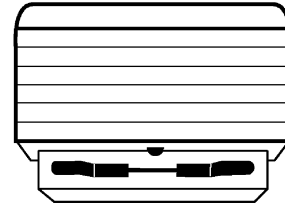


3. Clean the outside surfaces of the projection lenses and the stage with 3M<sup>®</sup> Overhead Cleaner 676 (70-0705-6877-2).

### Note

Cleaning the underside of the stage glass or fresnel lens is not recommended. Improper cleaning or disassembly may damage the fresnel lens. If cleaning is required, contact your local 3M Visual Systems dealer for assistance.

## Color Tuning

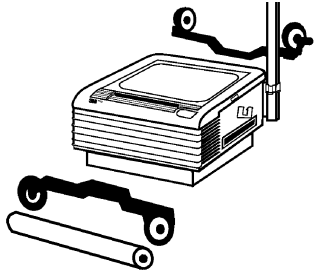
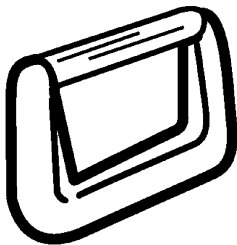

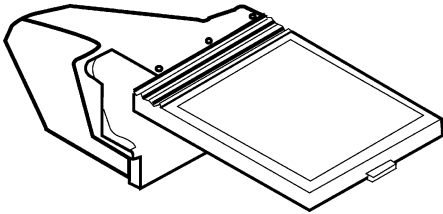
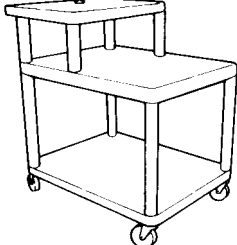
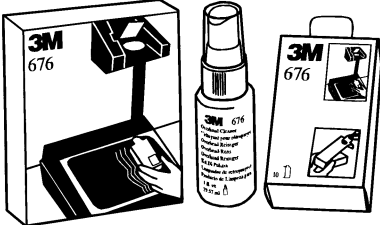
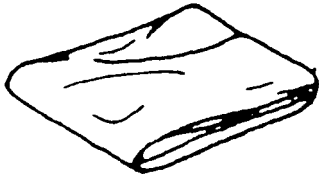

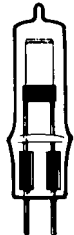



1. To eliminate red or blue corners on the screen, rotate the Color Tuning Dial.
  - a. Blue corners - Rotate the dial to the left.
  - b. Red corners - Rotate the dial to the right.

## Troubleshooting

Problem	Probable Causes	Solution
Lamp does not come on - fan runs	<ul style="list-style-type: none"> <li>\$ Lamp is burned out</li> <li>\$ Lamp is not seated in the socket</li> <li>\$ Lamp changer door is open</li> </ul>	<ul style="list-style-type: none"> <li>\$ Replace or change lamp</li> <li>\$ Seat lamp all the way in socket</li> <li>\$ Close door</li> </ul>
New lamp lasts for more than one minute but less than 2-5 hours	<ul style="list-style-type: none"> <li>\$ Defective lamp</li> </ul>	<ul style="list-style-type: none"> <li>\$ Replace lamp</li> </ul>
New lamp burns out immediately after turning on	<ul style="list-style-type: none"> <li>\$ Defective lamp</li> <li>\$ Electrical problem</li> </ul>	<ul style="list-style-type: none"> <li>\$ Try <u>one</u> more lamp. If 2nd lamp blows, have machine checked</li> </ul>
Fan doesn't run, but lamp is on	<ul style="list-style-type: none"> <li>\$ Fan or motor is obstructed</li> </ul>	<ul style="list-style-type: none"> <li>\$ Have machine serviced</li> </ul>
Neither lamp nor fan comes on	<ul style="list-style-type: none"> <li>\$ Not plugged into power source</li> <li>\$ No power at the wall outlet</li> <li>\$ Top cover not down all the way</li> </ul>	<ul style="list-style-type: none"> <li>\$ Plug into power source</li> <li>\$ Check power supply</li> <li>\$ Close top cover all the way</li> </ul>
Projected image is wider at the top or on one side of the screen	<ul style="list-style-type: none"> <li>\$ Screen is not perpendicular to the projected image</li> </ul>	<ul style="list-style-type: none"> <li>\$ Reposition the screen surface to be 90_ to the projected image</li> </ul>
Corners of projected image appear red or blue or the bottom or sides of projected image are not in focus	<ul style="list-style-type: none"> <li>\$ Misaligned optical components</li> <li>\$ Lamp not of the proper type</li> </ul>	<ul style="list-style-type: none"> <li>\$ Have optical components adjusted by qualified technician</li> <li>\$ Replace with proper type lamp</li> </ul>

# Accessories – Accessoires – Accesorios

 <p>Roller Attachment – 10 1/4" (260 mm) Attachment à roulettes Accesorio para el rodillo</p> <p>78-6969-7214-6      HA5760</p>	 <p>Carry Handle Poignée pour porter Manija de transporte</p> <p>78-6969-7968-7      HA5781</p>	 <p>Write-on Film Roll Rouleau de pellicule à écrire Rollo de Pelicula para Escribir</p> <p>78-9020-1282-8 – 10 1/4 " (260mm) AF4310</p>
 <p>Travel Cover Couvercle pour voyager Cubierta para Viajes</p> <p>78-6969-7969-5      HA5785</p>	 <p>Overhead Presenter's Cart Chariot pour rétroprojecteur Carro para Presentación del Proyector</p> <p>78-6969-7217-9      HA5651</p>	 <p>Overhead Cleaner Nettoyant pour rétroprojecteur Limpiador de retroproyectors</p> <p>70-0705-6877-2</p>
 <p>Dust Cover Couvercle anti-poussières Cubierta para Polvo</p> <p>78-6969-7216-1      HA5792</p>	 <p>Lamp    ENX – 9050, 9060, 9070, 9080, 9100 Lampe   FXL – 9075, 9085, 9200 Bombilla</p> <p>ENX – 78-6969-8027-1    HA6000 FXL – 78-6969-7947-1    HA6005</p>	 <p>Lamp Lampe Bombilla</p> <p>EVD 78-6969-7970-3      HA6009 FNT 78-8054-1175-4</p>
 <p>Cord Wrap Crochets pour cordon d'alimentation Envoltura del Cordón</p> <p>78-6969-7993-5      HA5786</p>		