



**BELL & HOWELL**

# ***Moviemaster***

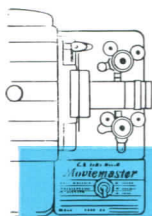
**Model 635  
8mm. Cine Projector  
Instruction Manual**



# Register your projector now

Make sure that your Bell & Howell guarantee is valid by mailing the accompanying guarantee registration card within seven days (U.K. only) from the date of purchase. Registration of your projector provides these advantages:

- *Helps to locate lost or stolen equipment.*
- *Enables you to obtain the full benefits of our guarantee.*
- *Enables you to receive full service facilities.*



The serial number of your

**Model 635 projector**

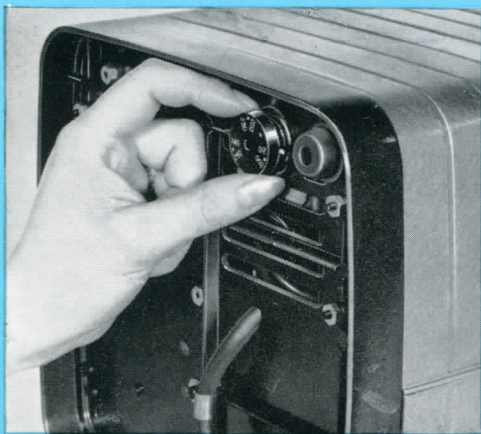
will be found on the name plate as illustrated

## Setting up

Your Moviemaster projector is for use with alternating current (50 cycles A.C.) only, within a voltage range of 110 to 240 volts or 200 to 250 volts, according to the model.

This voltage range is indicated on the projector name plate and individual voltage tapings are marked on the Voltage Selector Control situated at the base of the machine.

**Always make certain that the projector is disconnected from the mains supply before adjusting the voltage selector, or changing lamps.**



Lay the Moviemaster on its side and locate the Voltage Selector Control and white indicator mark on the base of the projector. Determine the voltage supply to be used. (If in doubt, consult your local electricity authority.) Pull out the Voltage Selector Control and rotate it in either direction until the correct voltage is opposite the white indicator mark, then push in the control until it locates firmly in the socket.



Place the projector on a table or other support at a convenient operating height with the front nearest the screen. Make certain that there is no obstruction to the air intake at the base. (Loose papers or similar objects could impede the flow of air for cooling purposes.)

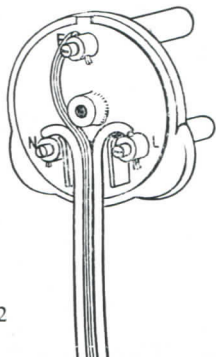
Grasp the carrying handle of the projector, depress the spring button on top of the case and remove the detachable cover by exerting pressure in the direction of the arrow.

Remove the reel from the slot in projector base and unwind the power supply cable.

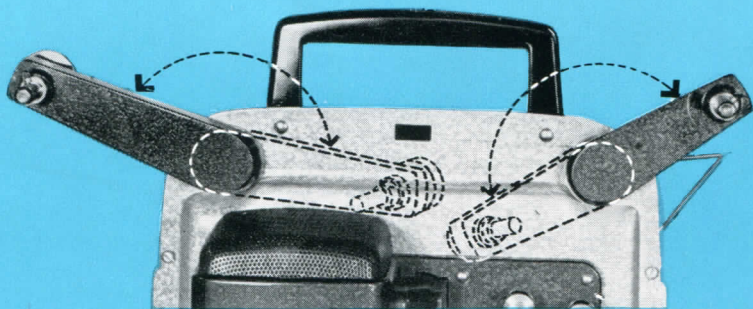
Connect the ends of the power cable to a suitable three-pin plug as shown.

Remove the cover of the plug and hold with the large (Earth) pin away from you.

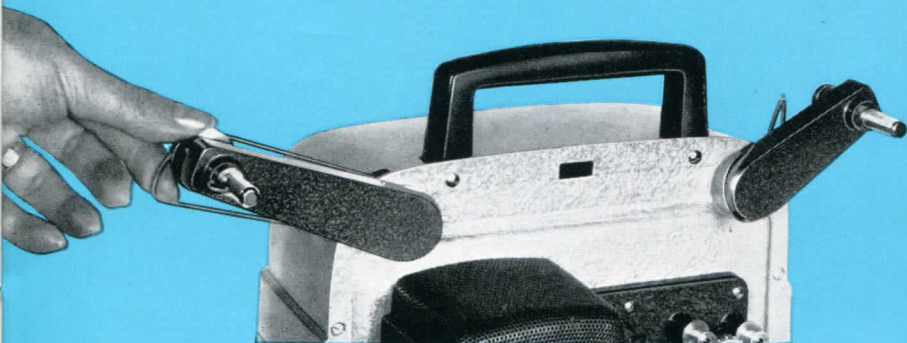
With the ribbed centre conductor upwards, secure the right-hand lead to the right-hand (live) small pin. Connect the left-hand lead to the left-hand (neutral) small pin, and the ribbed centre lead to the large (earth) pin.



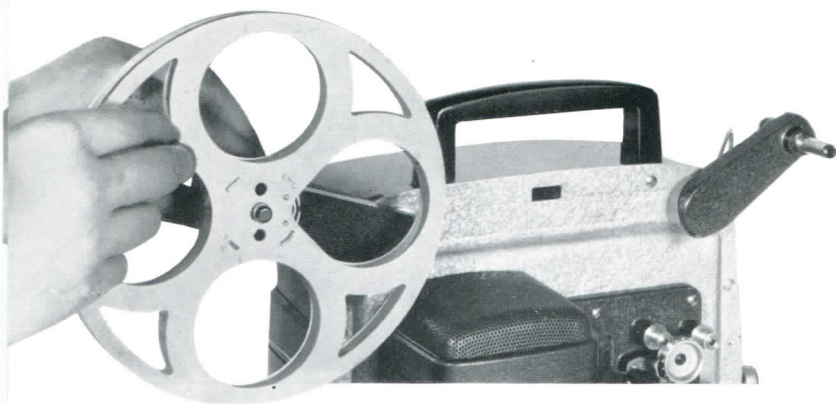




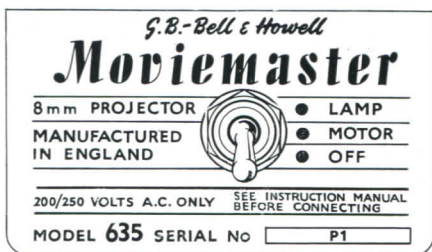
Extend the reel arms in the direction shown by the arrows until they are resting firmly in their fully upright positions.



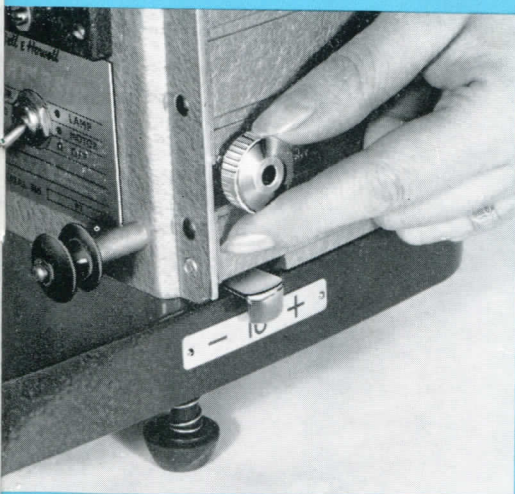
Connect the take-up belt to the pulley of the take-up arm.  
(Do not connect the front (Rewind) belt at this stage.)



Place the empty reel supplied on the take-up arm spindle and check that this is held securely by the spring clip. Note that the reel will only engage the spindle from one side and must be positioned with the centre slots facing the reel arm.

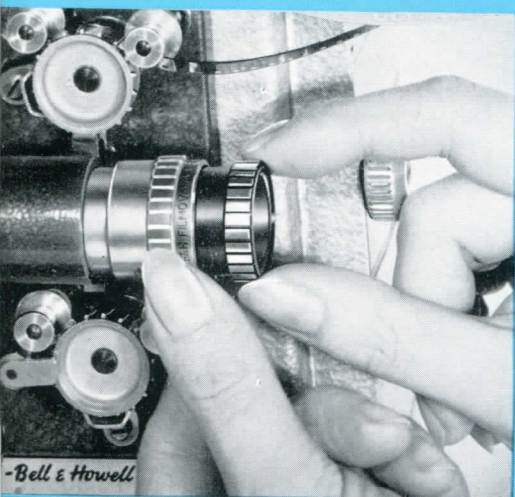


Connect the Moviemaster to the mains supply and place the projector switch to 'Motor', pause momentarily, then switch to 'Lamp'. It is not recommended that the switch be moved directly to the 'Lamp' position.



Centralise the light beam on the screen by turning the projector slightly from side to side and adjusting the tilt control. To operate the tilt control turn it in an anti-clockwise direction until it is loose enough to allow the leg at the front of the projector to be extended. Lift the front of the projector until the desired position has been reached, then tighten the control to hold the projector securely in this position.

Adjust the projector lens as described below until a sharp outline of the illuminated picture aperture covers exactly the white area of the screen. Switch off the projector before commencing to thread the film.

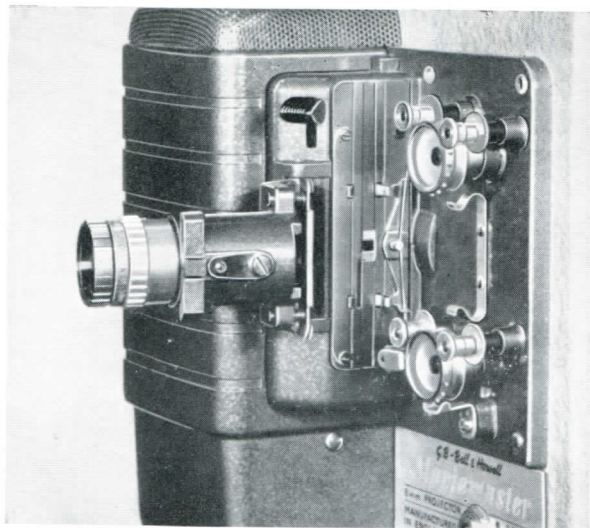


Your Moviemaster is equipped with either the Filmovara or Increlite lens. The Filmovara lens is variable in focal length between 15 mm. and 20 mm. and, operating on the 'Zoom' principle, enables you to adjust the size of the projected picture within reasonable limits to match the screen size, without having to move the projector or screen. To operate the Filmovara lens, rotate the front section of the lens mount to get approximate picture size, then focus by rotating the rear section until the picture is sharply defined. It is possible to manipulate both sections simultaneously with a little practice.

If your projector is fitted with the Increlite lens it will be necessary to vary the distance between projector and screen to achieve the desired picture size. Sharp focus is then obtained by rotating the lens as a whole.

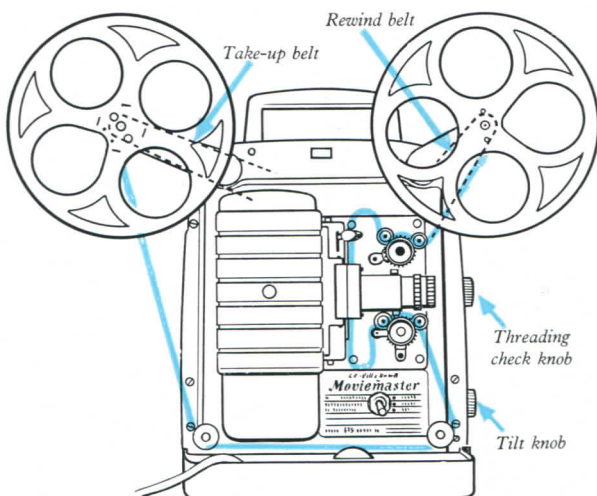


## Threading the projector

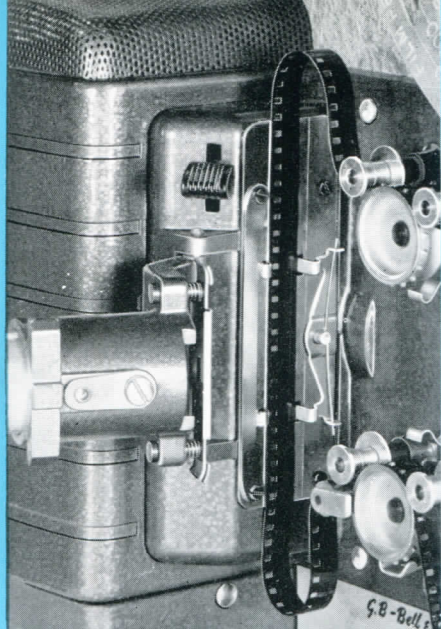


Pull gently on the lens carrier and swing it away from the projector as shown. Place the reel of film to be shown on the feed arm spindle, and make certain that the reel is securely held in place by the spring clip.

Unwind three or four feet of film. (The film should lead off the reel in a clockwise direction with the perforations towards the operator.) Guide the film along the path shown in the diagram taking care that the perforations engage accurately on the sprocket teeth, and that film loops do not extend beyond the area indicated in diagram.





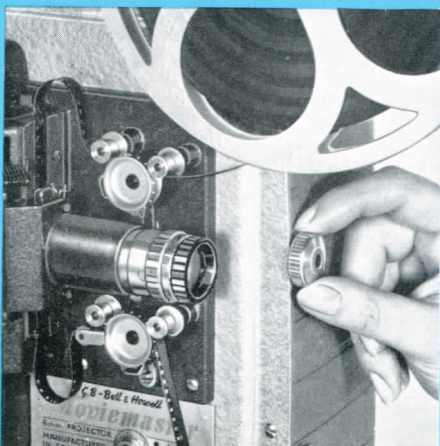
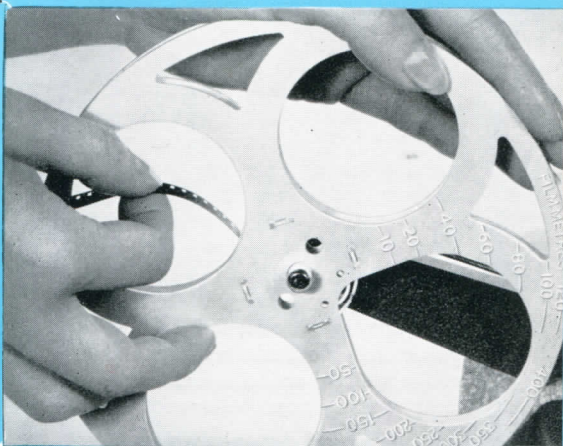


The film should be positioned evenly in the film gate channel, between the guides, as illustrated, and film loops must be correctly formed.

(NOTE: If loops are not formed as indicated the projector will not function correctly and damage to the film may result.)

Swing the lens carrier to the closed position. Guide the loose end of the film under the two guide rollers and on to the hub of the take-up reel.

Engage the end of the film in the slot of the take-up reel then turn clockwise to take up slack film.



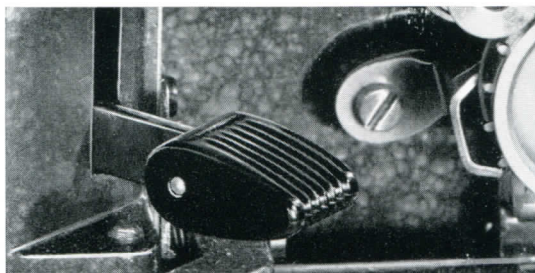
Check for correct threading by turning the threading control clockwise while observing movement of film through the projector. If film loops do not stay in position open the lens carrier and re-position film in the gate and on the sprockets. Check threading before switching on.

## The show begins

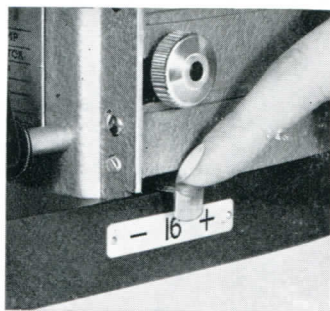
Place the projector switch to 'Motor', then, after a pause, to 'Lamp', and turn off room lights.

Focus the lens until the picture on the screen is critically sharp.

If the picture is cut off at top or bottom move the framer gently up or down until the full picture is correctly centred. The framer control provides a very fine adjustment and should not be moved violently.



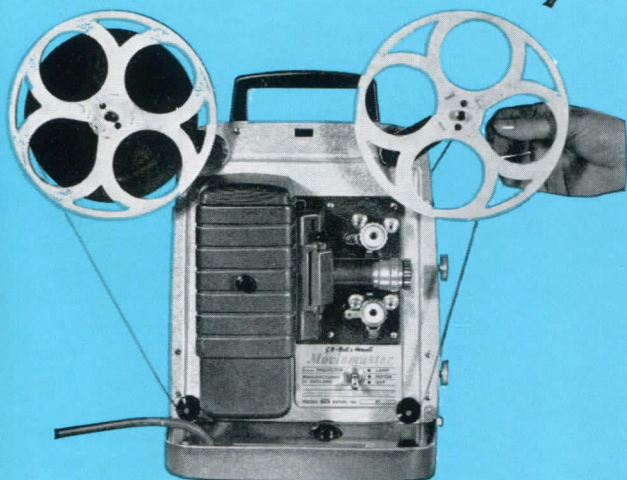
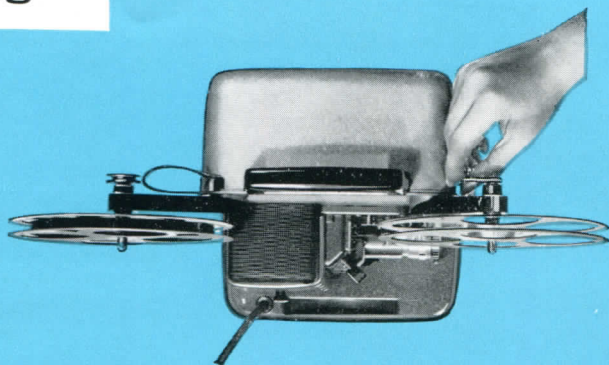
The speed control allows the projection of films taken at speeds other than the normal speed of 16 frames per second. It must be used only when the projector is operating. For your own personal films the control will be set approximately on '16'. If required to slow down action, move the control slowly towards '-'. To speed up move gently to '+'. When showing 'Moviepaks' or other commercially produced films, adjust the control until the action as seen on the screen appears normal. When the 'End' title appears on the screen, or just before the end of film reaches the film gate, place the switch at 'Motor'.



Allow the motor to run for one or two minutes to ensure that the projector lamp is cool before finally switching off. By doing this you will get the utmost life from your lamp. Avoid jolting the lamp or moving the projector while the lamp is hot.

## Rewinding

Remove the take-up belt and engage the rewind belt.

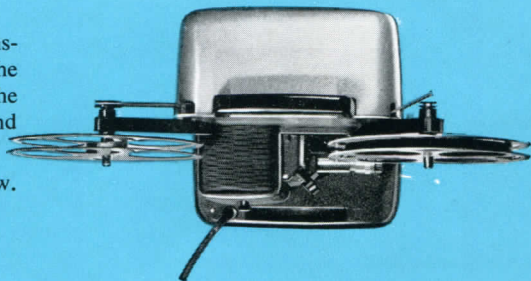


Guide the loose end of film from the take-up reel under the two rollers and insert the end of film in the slot of feed reel. Rotate the feed reel in an anti-clockwise direction to take up the slack.

Switch on projector motor only.

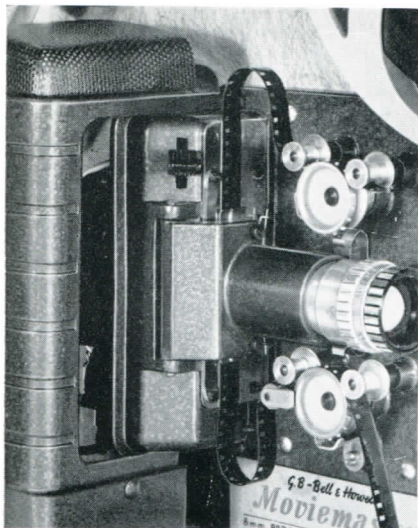
When all of the film has been transferred to the feed reel, switch off the projector and immediately replace the take-up belt and disconnect rewind belt.

You are now ready for your next show.





## Taking care of your projector

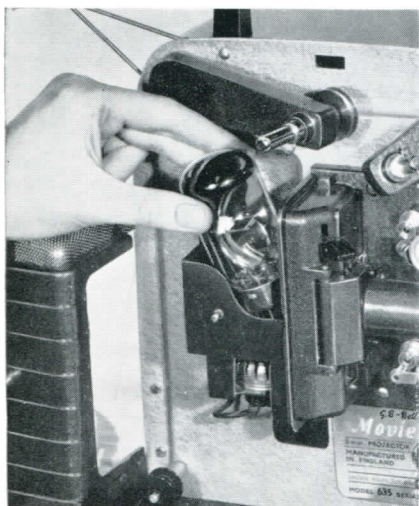


Built for a lifetime of dependable service your Moviemaster requires the minimum of maintenance, and no lubrication is necessary. But, to obtain a consistently brilliant and sharp picture, the lens must be kept clean, and occasionally you may need to replace the lamp.

To remove the projector lamp, turn the lamphouse retaining screw until the lamphouse cover can be withdrawn. Place in a safe position so that there is no danger of it being dropped and damaged. Ensure that the lamp is cool before touching. Grasp the lamp firmly at the top of the glass envelope and ease upwards with a slight rocking motion until it is free of the socket. When inserting a new lamp, position it over the lamp socket with the built-in reflector facing towards the lens. Locate the keyed centre post at the base of the lamp in the corresponding hole of the lamp socket. Push downward with firm pressure until the lamp is securely held in position.

After insertion of the lamp, immediately replace the lamphouse cover by sliding it along the guides and firmly pressing against the projector body. Engage and tighten the retaining screw just sufficiently to secure the cover in position. **DO NOT USE UNDUE FORCE.**

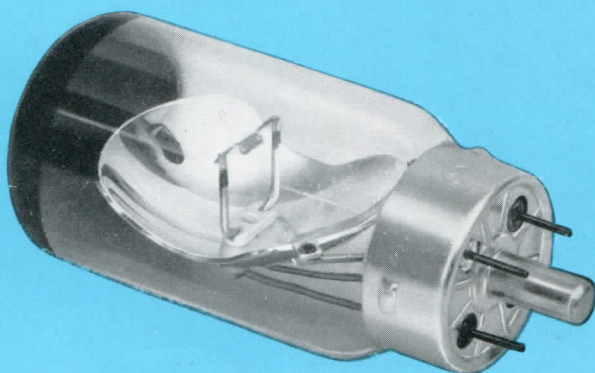
**Remember:** You must never switch on the projector lamp unless the lamphouse cover is in place.





Clean the lens frequently to maintain maximum screen brilliance and definition. To remove the lens, grasp the rear section at the grooved collar and pull out with a twisting motion.

Clean the front and rear elements with lens tissue or clean chamois being careful not to exert too much pressure. Replace the lens by inserting in the lens carrier and pushing home with a twisting motion.

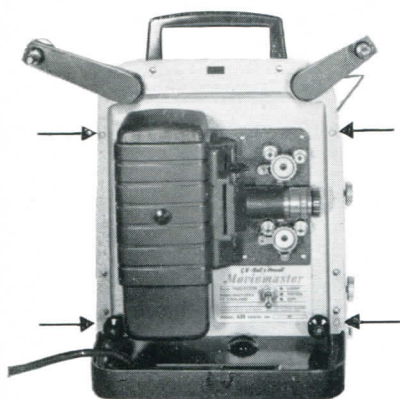


Clean the film gate, aperture, sprockets and guide rollers before each show. It takes only a few seconds and eliminates the possibility of dirt particles showing on the projected picture.

To remove accumulated foreign matter which is not affected by brushing, use a small piece of sharpened wood or plastic.

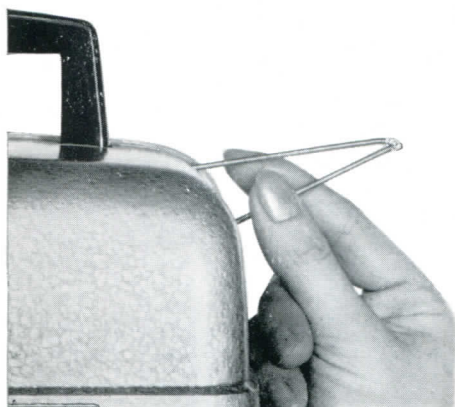
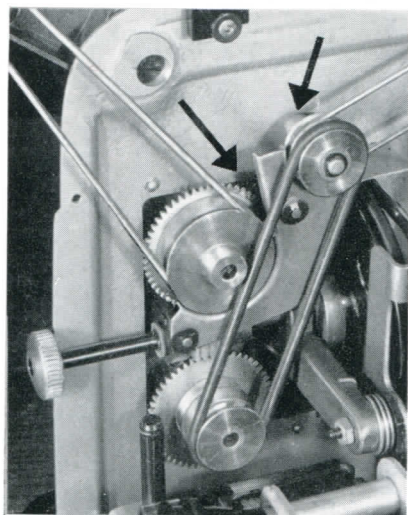
#### **DO NOT USE METAL OBJECTS**

## Replacing belts



Remove the four screws at front of projector...(Arrowed) and take off the back cover. Disconnect the used belt at the pinched ends and withdraw from the drive pulley.

Insert the new belt into the groove of the pulley as shown, and secure the ends of the belt. Use pointed nose pliers to squeeze the belt ends together.



Replace the back cover taking care to see the belts are located in the guide slots in the back cover.

## Accessories



Always have a spare lamp available in case the existing lamp burns out during projection. Be certain to specify the type of lamp and model number when ordering. Your Moviemaster uses the ATLAS Tru-Flector lamp rated at 21.5 volts—150 watts.

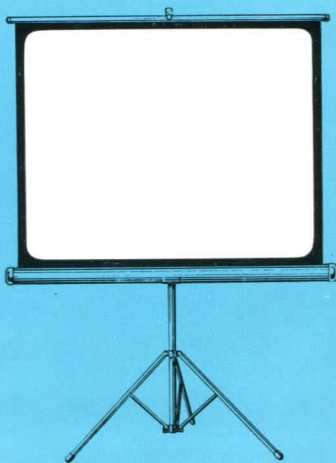


Easy to fit and simple to operate, the Bell & Howell Pistol Grip is scientifically designed to promote maximum camera steadiness combined with the most comfortable hand-grip.



Make your own perfect 8mm. movies with the Bell & Howell AUTOSET cine camera. It's the perfect partner to your Moviemaster projector.

Ask your Bell & Howell dealer for details . . .



Enhance the projection of your films by using a DA-LITE screen. See your Bell & Howell dealer for a demonstration.

## Guarantee

This product of The Rank Organisation is guaranteed to be free from defects in materials and workmanship for one year from date of original purchase. This guarantee also applies to Taylor-Hobson lenses.

Should, in our opinion, any part of this equipment be defective in materials or workmanship it will be replaced or repaired free of charge (except for carriage), provided the equipment has been operated according to the instructions accompanying it.

This guarantee and undertaking does not extend to projection lamps or other proprietary articles, which normally will be guaranteed by the manufacturer concerned.

No liability is assumed for damage to film, and no liability is assumed for loss, damages or expenses resulting from interruptions in the operation of equipment.

This guarantee and undertaking is only in favour of the initial retail purchaser.

It is void:—

- a) If the equipment has not been registered by completing the accompanying registration card and returning it, in the case of a purchase in the United Kingdom to The Rank Organisation within 7 days or in the case of a purchase abroad, either to The Rank Organisation or to their accredited overseas agents within 21 days of the date of original purchase.
- b) If in our opinion the equipment has been damaged by accident misuse or negligent handling or operation.
- c) If the equipment has been altered repaired or serviced by other than approved Service Agents appointed by The Rank Organisation.
- d) If adaptations or accessories other than those manufactured or recommended by The Rank Organisation have been made or attached.

### The Rank Organisation

**The Type and Serial Number of your equipment must always be quoted in all correspondence, claims, etc.**



## Projected Picture Sizes

*Upper Dimension is width of picture  
Lower Dimension is height of picture  
Measurements are feet and inches*

LENS	DISTANCE IN FEET—PROJECTOR TO SCREEN						
	8	10	12	15	20	25	30
Filmovara at 15 mm. setting	2 5	3 0	3 7	4 6	6 0	7 6	9 0
	1 9	2 3	2 8	3 4	4 6	5 7	6 9
Filmovara at 20 mm. setting	1 9	2 2	2 7	3 3	4 4	5 5	6 7
	1 4	1 8	2 0	2 5	3 3	4 1	4 11
Incelite 25 mm. (1 inch) Lens	1 5	1 10	2 2	2 9	3 8	4 8	5 7
	1 1	1 4	1 8	2 1	2 9	3 5	4 2

## GUARANTEE REGISTRATION CARD

THE RANK ORGANISATION  
CINE AND PHOTOGRAPHIC DIVISION  
MITCHELDEAN, GLOUCESTERSHIRE

Date.....

*I now own the Model 635 identified by the serial number quoted below.  
Please register my equipment.*

Name .....  
(BLOCK LETTERS)

Address.....

.....

Serial Number..... Date Purchased.....

Purchased from .....

*Inspector's signature*

*Serial Number*

Service Facilities for Bell & Howell equipment are available throughout the world. If you need advice or assistance with cine problems, please contact your nearest accredited Bell & Howell dealer, the address of whom may be obtained by writing to:

**The Rank Organisation**

***Cine and Photographic Division***

*Eastern Avenue, Mitcheldean*

*Gloucestershire*

*Telephone: Drybrook 421*



**THE RANK ORGANISATION**

**CINE & PHOTOGRAPHIC DIVISION**

**MITCHELDEAN GLOUCESTERSHIRE DRYBROO 421**