

KODAK PROJECTION TIPS

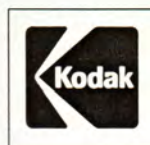
Recent field experience has provided some useful tips for successful projection of motion picture colour, and black and white prints. These tips reinforce existing guidelines, and will reduce problems and concerns in projection boxes.

PROJECTION BOX

1. **The correct alignment and maintenance** of all rollers and guides in the film path is critical to trouble-free projection. Regular checks to ensure all rollers are free-running, and clean are essential. Should this be neglected it can result in wear, damaging the film edges and perforations, which will cause dirt, unsteadiness and even film breaks.
2. **Ensure that the ambient relative humidity (RH)** is in the range 50-60%. (*This can be measured with a hand-held meter, available from High Street electronic stores.*) Projection boxes with a lower RH may experience static cling, excessive curl, focus flutter, unsteadiness, and/or excessive projection noise. **Note:** *excessive curl may cause winding difficulties.*
3. **Film platters with non-conductive surfaces** require treatment with antistatic solution to avoid static build-up. This will reduce static cling, leading to 'brain-wrap' and film breaks in serious cases, especially if the RH is also low (see para. 2. above).
4. **Conductive PTR film cleaning rollers** should be used. Regular cleaning of the PTR rollers should be carried out to remove dirt build up on the rollers.
5. Tension-sensing fail-safe devices should be used when projecting polyester prints. This will avoid equipment damage as polyester film will not break before equipment damage has occurred.

OPERATIONS

1. **Black and white prints will always need lubrication.** The correct procedure for applying a wax to lubricate the print is shown overleaf.
2. **Splices should be butt joined**, overlapping the film or wrapping the tape around the film splice will cause problems.
3. **Colour prints may also benefit from waxing** if they are noisy, unsteady, or produce more dusting. **Note:** *It is important to check that all equipment is correctly aligned and maintained. Also check under these circumstances, that the ambient RH is 50-60%.*



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Kodak Suggestions for Extending the Projection Life of Motion Picture Colour and Black & White Prints (Acetate or Polyester) by Edge Waxing

Recent trade experience has shown that some 35mm print films may require regular lubrication during projection to minimise friction and to increase print life and steadiness. Black & White prints should always be lubricated.

Projection room conditions that are high in ambient temperature, or below 50-60% relative humidity will increase the likelihood of a deterioration in film projection. Ensuring the correct alignment and free running of rollers, and correct projector maintenance will also significantly assist trouble-free operation.

Should correct maintenance and alignment be neglected, perforations and film edges can become damaged thus increasing further the likelihood of the film becoming dirty, unsteady, and in more serious cases breaking during projection.

To assist film projection a lubricant wax can be applied to the film edges. This is best done when the film is in roll form, and by gently applying a thin smear of wax to both sides of the reel.

'Side-wall waxing' will alleviate excessive dirt or dust build up on film projection rollers and in the projector gate. The lubricant that needs to be applied is a paraffin based wax - KIWI Neutral Shoe Polish (solid type only) or SC Johnson's paste wax. Further applications may be necessary to sustain trouble free projection. For Black & White prints this should be repeated every 6 screenings.

Summary of Recommendations:-

- Clean the film Ultrasonically or with Particle Transfer Rollers.
- Apply a small quantity of the wax to a soft cloth and smear lightly over both sides of the film reel. Be careful not to apply too much. Re-apply as needed.
(It is best to apply small amounts in several smears to avoid over applying on one larger initial application.)
- DO NOT USE ANY OTHER TYPE OF LUBRICANT SUCH AS MOTOR OIL, PROJECTOR OIL, AEROSOL WAXES OR WATER BASED SOLUTIONS WHICH COULD DAMAGE THE FILM.

Contact Mark Handley on 01442 845341, or Clive Ogden on 01442 844063, or John Clifton on 01442 844064 if you need further assistance.



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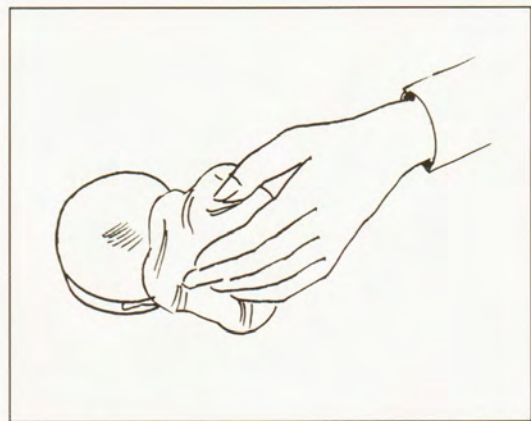
The Kodak device, KIWI and SC Johnson are trade marks.

Edge Waxing Step by Step

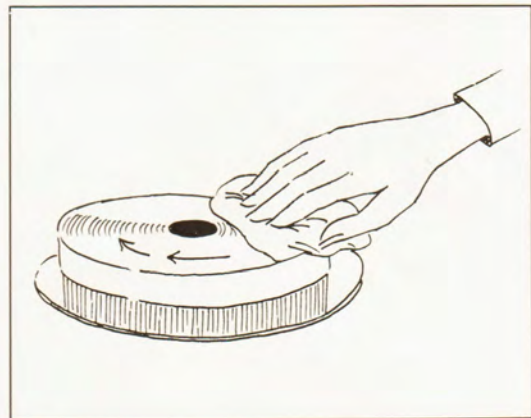
- 1.** To assist film projection a lubricant wax can be applied to the side walls of the film roll. The lubricant you should apply to your film is a paraffin based wax KIWI Neutral shoe polish (solid type only) or SC Johnson's Paste wax.



- 2.** Apply a small quantity of the wax to a soft cloth.



- 3.** Gently apply a thin smear of wax evenly over the side walls of the film. It is best to apply small amounts in several smears to avoid over applying in one larger initial application.



- 4.** Turn the film reel over and apply to the other side. Be careful not to apply too much, but re-apply as needed.

