



Kodak Projection Troubleshooting Guide

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Projector

Problem	Probable Cause	Remedy
Vertical unsteadiness	Perforation damage	Remove damaged section of film if less than two feet - otherwise, replace reel
	Improper loop size	Re-thread
	Incorrect gate tension	Increase tension, but do not cause the film to be pulled noisily over teeth - if this doesn't work, try replacing tension spring
	Lack of lubrication	Apply SMALL amount of Johnson Paste Wax to film edges before it enters gate
	Deposits on traps	Remove deposits with scraper and wipe with alcohol
	Sprocket noise	Check for hooked teeth and replace if necessary
Horizontal weave		Most likely, the spring-loaded guide rollers need adjustment so that film is held firmly in place and not allowed to move horizontally. Check both the spring and the rollers themselves
Soft image		Dirt is the usual problem, so clean front and rear lens elements as well as port glass. If either the cemented lens elements have separated or the film itself has separated between emulsion and base layers due to excessive heat, the lens or print must be replaced
Unable to stay in focus		Heat must be decreased either by reducing xenon current and wattage or using heat absorbers; make sure light is properly distributed so there is no "hot spot"
Soft or dark image at screen perimeter		The projector angle is too large or projector needs re-alignment; tilting the screen might help, although this is a major operation. Use test film RP-40 to try to re-align projector so it is properly targeted at screen centre
Misframed image		Re-make the splice, since this is most likely cause. If not a specific splice, try adjusting the pad roller or simply start over and re-thread
Film clatter at gate	Excessive gate tension	Reduce
	Lack of lubrication	Lubricate as specified above
	Mis-aligned pads	Align
	Gate not closed tightly	Close
Travel ghosting	Incorrectly timed shutter	Needs to be adjusted according to projector manual specifications
Dark spots on screen image	Dirt on film	Use lint-free gloves ALWAYS when handling film; keep film off floor; do not smoke in the booth; use PTR's to continuously clean film. In short, maintain as near pristine film environment as possible
Scratches	Film rubbing against abrasive surface, often in the process of being loaded onto a platter	Align all rollers so film is always seated properly on them and make sure film does not rub against edge of platter when being loaded; check for burred edges on aperture plate; check for non-rotating rollers as well as burrs on sound drum

Film Static

Problem	Probable Cause	Remedy
Static build up on film causes sticking and makes "popping" sounds	Check the following	<ol style="list-style-type: none"> 1. Adjust relative humidity (should be 50-60%) through HVAC if possible 2. Use foam belt humidifier to maintain adequate humidity 3. Place a damp sponge in a small dish next to film on platter overnight; cover with platter cover so that moisture gets into film. DO NOT put any moisture directly onto film 4. Avoid using high speed for make-up or rewind 5. Use anti-stat spray on surfaces near film - NOT on the film 6. Blow ionized air from a corona discharge airionizer onto film platter and as it runs 7. Install several PTR rollers on platter tower to continuously clean film

Sound

Problem	Probable Cause	Remedy
No Sound	<p>Amplifier malfunction</p> <p>Speaker failure</p>	<p>Plug in patch cords firmly</p> <p>If all speakers have no sound, problem is with soundtrack or in the booth; replace any blown fuses; check to make sure soundtrack is threaded on the correct side; install new exciter bulb or consider replacing with red LED soundhead</p>
Loss of high frequency	<p>Scanning beam improperly focused</p> <p>Dirty sound optics</p>	<p>Adjust fidelity focus and align soundhead with test films</p> <p>Clean sound optics with approved lens cleaner and tissue</p>
Garbled sound	<p>Inadequate loop size from aperture to scanning point</p> <p>Film not being held at scanning point</p> <p>Dirt on soundtrack</p>	<p>Increase</p> <p>Check roller tension as well as lateral guide roller pressure</p> <p>Clean</p>
Hissing sound ("rain")	Scratches on soundtrack	Cannot be repaired; replace reel or print
Crackling ("frying eggs")	<p>Socket corrosion, loose wiring or terminal connections</p> <p>Cracked diaphragm</p> <p>Problem with photocell</p>	<p>Must be serviced by qualified sound technician</p> <p>Replace - rubber cement applied to either side of tear will temporarily diminish noise</p> <p>Tighten photocell bracket or replace damaged photocell element</p>
Extraneous noise	<p>Stray light on photocell</p> <p>Radio transmissions</p> <p>Amplifier feedback</p>	<p>Shield from light</p> <p>Shield wires to interrupt antenna effect</p> <p>Ground and shield wires</p>

Platters

Problem	Probable Cause	Remedy
Film breakage during assembly or teardown of reels	Excessive tension on film	Reset speed control on make-up table so that speed builds gradually rather than pulling the film rapidly at the outset
Return arm will not take up film	Either the film position sensor is stuck in the ON position or the motor wheel is slipping	Correct either situation
Platter will not rotate	No power	Check to see if unit is plugged in, drive motor plugged into column assembly, and circuit breaker is not tripped
	Drive wheel may be loose	Tighten or replace
	Platter switch may be set incorrectly; wiring and/or connections may be faulty; control sensor may be defective	Check LED
Platter runs all the time	Faulty control sensor	Check end cap to make sure ambient light is not leaking into sensor
	Film position sensor may be stuck in ON position; speed control may be improperly set; wiring or connections may be loose	Correct situation
Platter rotates too slowly	Check the following	<ol style="list-style-type: none"> 1. Motor speed control 2. Slippage of drive wheel 3. Worn drive motor brushes 4. Platter bearings may need lubrication or replacement 5. Set-screw in LED filter assembly may be loose 6. Removable platter brain must be firmly seated 7. If speed control is faulty, it must be replaced 8. If speed control fuse is blown, replace fuse and/or reset circuit breaker 9. Free movement of feed arm on brain (filter assembly on Christie equipment or brain spring on ORC may need replacement) 10. Platter system may be off balance 11. Servopot spring may need adjustment or replacement
Platter rotates too rapidly	Check the following	<ol style="list-style-type: none"> 1. Feed arm on brain may stick (filter must move freely and set-screw must be tight) 2. Speed control card may need to be replaced 3. Servopot may be out of adjustment 4. Make sure feed arm spring is in position (ORC) 5. Make sure brain tension spring is in position (ORC)
End of film slips off platter and wraps around support arm and spindle	Tail not properly secured with stopper or print tuck	Secure the tail and make sure reel is centred on platter
	Fan or air duct blowing onto platter	Redirect air source away from platter

Automation System

Problem	Probable Cause	Remedy
Will not start presentation	Failsafe improperly threaded	First, try re-threading the failsafe; if this doesn't help, activate the FAILSAFE BYPASS switch on the control panel
Xenon bulb will not ignite	Lamphouse door is probably not closed so the switch cannot be activated	Manually push in the SWITCH/REPLACE switch and either tape it in place or tape the lamphouse door closed
System stops during the show	Check the following:	<ol style="list-style-type: none"> 1. Proper cue locations on the film 2. Cues that are too long that might "double cue" the system 3. Make sure INTERMISSION CUE switch is off 4. Bypass failsafe (as mentioned above, if necessary) 5. Film tension to make sure it is not being taken up with too much slack 6. Cue times may be memorised for an incorrect show 7. Cue tape may have peeled off 8. Make sure BYPASS detector is not accidentally in ON position if not intended to be there 9. LV power is supplied to the cue detector 10. Make sure system is accepting cues from the control panel
A specific accessory (dimmer, sound etc) does not function	External system does not operate	Manually operate it
	Relays and cables unplugged	Make sure they are tightly in their sockets

Xenon Lamphouse

Problem	Probable Cause	Remedy
Bulb will not strike	Bulb burned out	Replace
	Faulty power supply	Check circuit breakers and interlock safety system
	Igniter failure	Arcing and shorting may cause bulb not to strike if positive lead from bulb to igniter does not touch or come close to metal parts - if this is not the case, igniter may need replacement
Flicker	Uneven wear on bulb electrodes	Replace bulb
	Faulty diodes	Replace diodes
	Incorrect amount of power	Check "legs" of power supply
Incorrect light output (too much or too little)	Check the following	<ol style="list-style-type: none"> 1. Light-to-mirror and mirror-to-projector distances 2. Lamp must be kept running at recommended current 3. Lamp has incorrect wattage 4. Dirt on optic components 5. Dirty screen
Screen image improperly sized	Lens is incorrect focal length	If oversized - increase focal length, if undersized - decrease

Digital Sound

Problem	Probable Cause	Remedy
No sound	Check the following	<ol style="list-style-type: none">1. Film is encoded for digital playback2. Digital processor is on3. Processor is in correct mode for digital playback4. DTS disk is loaded correctly and right disk is in place5. Digital penthouse reader threaded correctly
Poor digital sound quality	Improper tension Dirt on lens of digital reader DTS and automation cables disconnected from processor	Re-thread Compressed air should be used daily on digital reader lens to remove dust/dirt. Connect cable, making sure DTS pin #1 is properly oriented
Thumping when DTS is in optical mode ("motorboating")	Sound head is picking up time code	Adjust sound head lateral alignment using buzztrack test film

In emergency situations and for equipment repair, contact a qualified service technician or engineer.

For more detailed projection and sound information, contact the equipment manufacturer, your dealer, theatre supplier or your local Kodak office.

Kodak

Motion Picture Film