

Unsteadiness problems with 35 BL Cameras

General

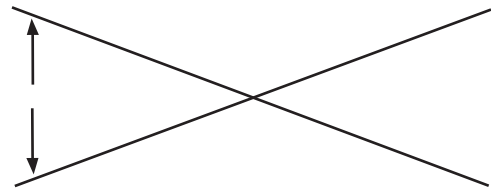
In general, the problem of unsteadiness in a 35 BL camera could be caused by several reasons. The following testing guide lines should help the user to specify the problems:

Height unsteadiness (Horizontal problems):

Unsteadiness movement in horizontal direction will show up in double exposure test.

The horizontal problems are mostly caused by the film channel, e.g. after changing the film gate (not in the incorrect tolerance).

See attached tolerance diagram for gate.



Double exposure:
Horizontal lines moving up and down

Check list for horizontal problems:

Problem	Description	Solution
Film Channel	Is the channel stable and in the correct measurements?	With the Grange tool, the focal distance of the flange can be measured. The movement should be tightly held in the slide when tried to be moved.
	Pressure plate could become displaced when the 4 adjustment screws are tampered with and the pressure plate becomes unstable.	Readjustment of the pressure plate.
	Film guide (Arri.:K5.35402.0) causes the channel to tighten.	Readjustment of the film guide
Movement	Timing between the register pin and the pull down claw is incorrect. The register pin should be working in the correct position against the pull-down claw therefore able to control the measuring	Readjustment (see attached drawing).

Vertical unsteadiness Problems: - unsteadiness movement in vertical direction.

Vertical unsteadiness problems are mostly caused by unadjusted magazines.



Double exposure vertical lines shifting from side to side

Check list for vertical problems:

Problem	Description	Solution
Magazine	Wrong position of the magazine in the camera. When the magazine is in the camera, then it has to touch the loop stoppers in the camera. The register pin must always correct the film on the same edge.	Readjusting of the magazine - use only upgraded BLII magazines.
Register pin bearings	- Is there free play in the side ways direction between the pin and the bearings.	Change the bearings
Movement	- Is the distance between the pull-down claw and the register pin correct	check the distance between the pull-down claw edge and the register pin edge. (see attached diagram)

We have noticed in the last years that not all of the film gates keep at the same precision, and can cause the film channel not to be precise, in turn causing the film channel to become unparallel.