



National Camera, Inc.
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THE SIMPLE-ESCAPMENT RETARD

Study Procedure and Practical Assignments



- I. Review your lesson, "Introduction to Shutters." Pay particular attention to the sections, "The Multiple-Blade Shutter," "Charting the Shutter's Operational Sequence," "The Complex Multiple-Blade Shutter," and "Tool Handling Tips."
- II. Read and study, "The Simple-Escapement Retard."
- III. You should know:
 - A. how the simple-escapement shutter differs from the complex-escapement shutter.
 - B. how the Gauthier-type main lever works.
 - C. how to operate the Pronto-shutter removed from the camera.
 - D. the procedures for disassembly and reassembly of the Pronto shutter.
 - E. the procedures for cleaning and lubricating the Pronto shutter.
 - F. the techniques used in the disassembly and reassembly of the main lever and mainspring in the Pronto shutter.
 - G. how to disassemble and reassemble the diaphragm in the Pronto shutter.
 - H. how to recognize other Gauthier-type shutters.
- IV. Following the instructions given in your text, disassemble and reassemble the Pronto shutter as often as necessary to gain complete familiarity with the mechanism. Be sure and apply the tool handling techniques outlined in your lesson, "Introduction To Shutters."
- V. You should know:
 - A. the function of every part.
 - B. how to replace any part.
- VI. Take a close look at the cycle-of-operations on page 25 of your lesson, "Introduction to Shutters." This cycle-of-operations is very close to the Pronto shutter you have just studied. Also study Servisheet 806, "The Cycle-Of-Operation"— especially the section beginning on the fourth page. Redraw the cycle-of-operations making the needed changes for the Pronto shutter. Notice that you must delete the time operation. Also, you must add the delayed-action mechanism and the flash contacts. Show the inner-release lever and the outer-release separately. Go over your cycle as many times as necessary until it is as near perfect as possible for the Pronto shutter. Then use the back of this page for making your final copy of the Pronto cycle-of-operations.
- VII. Make certain that the shutter is in perfect working order before returning it for grading. Remember --your customer will be grading you on every job you do. Make certain that your final inspection is thorough.
- VIII. Place your complete Lesson Quiz, form #6611, and your Study Procedure in the lesson envelope provided. Pack the envelope with the practice shutter and send it to the Instruction Department. To avoid delays, DO NOT include correspondence to other departments in your lesson shipment.